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MEDICINE AT MID-CENTURY, T. Eric Reynolds, M.D., Oakland 1

PULMONARY HYALINE MEMBRANE DISEASE—A Panel Discussion:

Pathogenesis, Benjamin Kagan, M.D., Los Angeles 4

Pediatrician's Point of View, Arthur H. Parmelee, Sr., M.D., Los Angeles 6

Obstetrician's Point of View, Edward B. Cantor, M.D., Los Angeles 7

Anesthesiologist's Point of View, Milton J. Marmer, M.D., Los Angeles 10

Internist's Point of View, Jack Lieberman, M.D., Los Angeles 11

RUPTURE OF DISSECTING ANEURYSM OF THE AORTA—The Relationship of Effort to Onset, Roy Cohn, M.D., Stanford University 13

RADIATION FACTS FOR PUBLIC HEALTH OFFICERS, Reynold F. Brown, M.D., San Francisco 16

BRAIN DAMAGE IN THE INFANT—GENETIC ASPECTS, Curt Stern, Ph.D., Berkeley 21

CARCINOMA OF THE UTERINE CERVIX—Interstitial Radioactive Colloidal Gold Therapy of the Lateral Pelvic Nodes, Captain William S. Baker, Jr., MC, USN, San Diego 25

DISABILITY OF THE BACK IN INDUSTRIAL WORKERS—Are Work Restrictions Justified on Roentgen Abnormalities Alone?, Herbert L. Herschensohn, M.D., Santa Monica 31

PYOGENIC INFECTIONS IN ORTHOPEDIC SURGERY—Prevention and Management, Colonel Edwin J. Pulaski, MC, USA, and Colonel Lloyd W. Taylor, MC, USA, San Francisco 35

CANCER OF THE LUNG IN WOMEN, Richard E. Ottoman, M.D., and Justin J. Stein, M.D., Los Angeles 38

CASE REPORTS:

Peripheral Neuritis Associated with Discoid Lupus Erythematosus, Clete S. Dorsey, M.D., Pasadena 40

Temporal Arteritis—A Report of Two Cases Without Systemic Symptoms, Morris E. Freedland, M.D., Long Beach 41

CALIFORNIA MEDICAL ASSOCIATION:

A.M.A. Meeting 47

Council Meeting Minutes, 453rd Meeting, October 31, 1959 50

Recent Trends in Professional Liability Cases 57

INFORMATION:

Income Taxes—Deductibility of Entertainment Expenses 64

C.M.A. ANNUAL REPORTS 73

EDITORIAL, 44 • WOMAN'S AUXILIARY, 63 • NEWS AND NOTES, 66
BOOK REVIEWS, 72

89th Annual Meeting, Los Angeles, February 21 to 24, 1960

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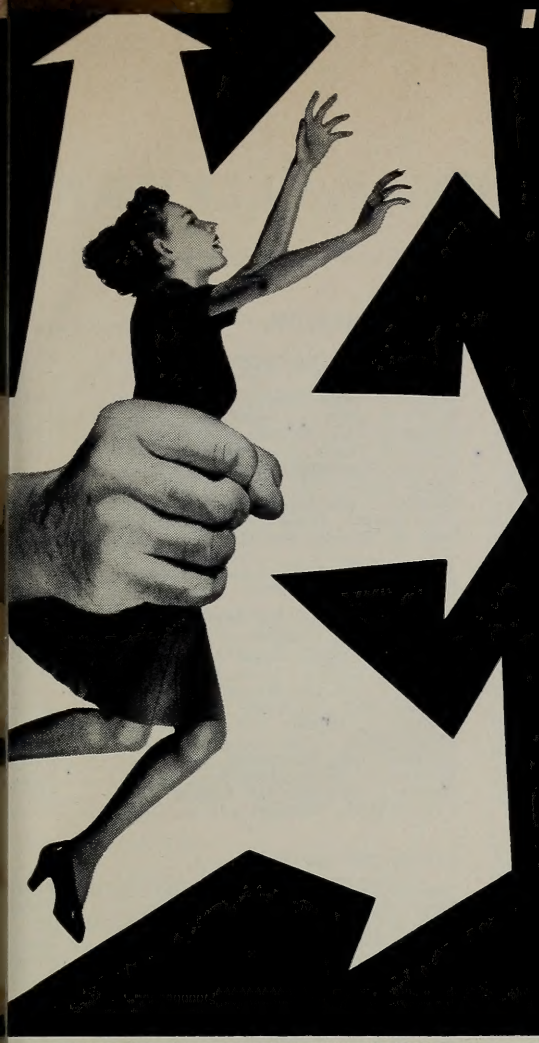
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Abbott Laboratories 29, 89
Alexander Sanitarium Incorporated 49
Ames Company, Inc. 62
Armour Pharmaceutical Company 9
Ascher & Company, Inc., B. F. 3, 78

Baxter Insert 16-17
Benjamin, M. J. 94
Birtcher Corporation, The 3
Bristol Laboratories, Inc. Insert 48-49, Insert 64-65
Burroughs Wellcome & Co. (U.S.A.), Inc. 18, Insert 80-81

California Physicians' Service, Officers 7
California State Personnel Board 24
Ciba Pharmaceutical Products, Inc. 30, 46, 51, 64
Classified Advertisements 80
Compton Sanitarium 70
Cook County Graduate School of Medicine 48
Cutter Laboratories 4th Cover

Darwin Laboratories 25
Desitin Chemical Company 26, 92
Doctors Business Bureau, The 36
Drug Specialties Inc. 71

Eaton Laboratories 83
Endo Laboratories 76

Geigy Pharmaceuticals, Division of Geigy Chemical Corporation 50
Greens' Eye Hospital 36

Irwin, Neisler & Co. Insert 32-33

Kip, Inc. 22
Knoll Pharmaceutical 7

Lady Lois Ice Cream 74
Lederle Laboratories, a Division of American Cyanamid Company 11, 20, 21, 24, 35, 41, 48, 49, 55, 68, 69, 74, 84, 85
Lilly and Company, Eli 58

Mead Johnson 47
Medical Protective Company, The 74
Merck Sharp & Dohme, Division of Merck & Co., Inc. 2nd Cover, 28, 71, 93

Obetrol Pharmaceuticals 40
Officers of the California Medical Association 2, 4, 5, 6

Parke, Davis & Company 12, 13
Pfizer Laboratories, Division, Chas. Pfizer & Co., Inc. 23, 34, 77
Physicians Casualty & Health Associations 70
Pitman-Moore Company, Division of Allied Laboratories, Inc. 88

Raleigh Hills Sanitarium, Inc. 36
Riker Laboratories, Inc. 1, 3rd Cover
Robins Co., Inc., A. H. 19, 31, 72, 75
Roche Laboratories, Division of Hoffmann-La Roche Inc. 33, 67, 91
Roerig Division, Chas. Pfizer & Co., Inc. 15, 27, 73, 87

Saffola Products 81
Schering Corporation 97
Searle & Co., G. D. 59
Smith Dorsey 17, 38, 52, 53, 63, 96
Smith Kline & French Laboratories 14, 54, 90
Squibb 42, 43
Stacey's 3
Stuart 39

Tidi Products 70
Tutag & Co. 22
Twin Pines Neuropsychiatric Sanitarium 24

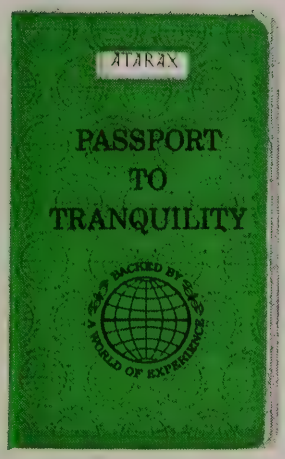
U. S. Vitamin 60, 61

Vantage Press 16

Wallace Laboratories 32, 37, 49, 79, 86
Wesson Oil & Snowdrift Sales Company 56, 57
Westwood Pharmaceuticals, Division of Foster-Milburn Co. 65
White Laboratories, Inc. 44, 45, 95
Winthrop Laboratories Insert 32-33
Witter & Co., Dean 10
Woodside Acres Hospital 16

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New Clue to Cause of Lupus Erythematosus Found

The outlook for lupus erythematosus, a disease long considered to be very serious and nearly always fatal, is not so bleak after all, two Detroit physicians have stated.

Reporting a study of 100 cases in the current issue of the *Journal of the American Medical Association*, Drs. Clarence E. Rupe and Stewart N. Nickel, Henry Ford Hospital, said the disease is more benign than previously suspected. They also offered a clue to the possible cause of the disease.

Lupus erythematosus, also called LE, was once considered to be only a skin disease, because of its typical butterfly pattern of rash across the bridge of the nose. However, it is a systemic disease, affecting the joints and such organs as the liver and kidneys.

Treatment with artificial hormones, such as those used for arthritis, has a beneficial effect on the disease process by slowing it down and by carrying the patient through crises which once would have been fatal.

The benign course of the disease was illustrated by the fact that only 2 per cent of the total group "proceeded to incapacity," the physicians said. In addition, more than half of the men remained in good health and at full capacity. Fifty of the patients survived the disease at least 10 years after the onset, and 45 of these are still living. Duration of the disease ranged from 10 months to 36 years.

The clue to a possible cause of the disease lies in the fact that many of the patients had streptococcic infections just prior to the onset of LE. Many had typical "strep throat" infections, while others had other streptococcic infections, such as boils or ear infections. This suggests that hypersensitivity to the streptococcus bacillus may be an important factor in the disease, the physicians said, adding that this association may eventually produce a means of prevention.

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Urologist's "Know-How" Aids Surgical Patients

A conscientious physician came to the aid of the thousands of patients who suffer from the common and distressing condition of urinary retention after surgery.

He is Dr. Myron H. Nourse, a urologist, from Indianapolis.

Dr. Nourse studied the problem, backed up his own findings with the results of a questionnaire which he personally mailed to 151 members of the American Urological Association, and concluded it was time "to organize our thoughts on this subject."

Writing in the *Journal of the American Medical Association*, Dr. Nourse said that the problems associated with this condition, which so many surgical patients dread, exist largely "because of increased numbers of patients hospitalized and decreased numbers of trained professional help."

Patients unable to void after surgery, in spite of a full bladder, normal kidney function, and the absence of any organic obstruction, usually undergo catheterization.

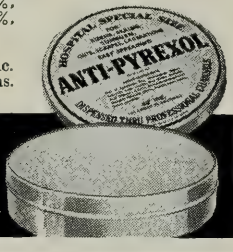
"Is this procedure really necessary?" Dr. Nourse asked. He said that while the answer must come only from the doctor in charge, his associate, or his assistant, consideration had to be given to many other complex factors, including the type of patient.

(Continued on Page 24)

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Urologist's "Know-How" Aids Surgical Patients

(Continued from Page 22)

He urged doctors not to write out catheterization orders too freely, but to give more realistic personal attention and supervision to the patient.

"Leaving routine postoperative catheterization orders to the interpretation and discretion of the nursing service is a practice to be discouraged," Dr. Nourse said in his article.

"Changing trends exist in hospitals today with regard to patient care," he said. "Personal attention to patients' simple wants and needs is often lacking. It is thought to be somewhat 'old-fashioned' to request that a considerate attitude be displayed. For example, many patients could urinate spontaneously after operation if the urinal were present and within reach. Adequate personal preoperative and postoperative instruction to the patient lends confidence and mental tranquility of a degree far superior to that effected by tranquilizing agents."

"Real bedside nursing has also become 'old-fashioned' and is for practical purposes a 'lost art,' " he said, adding: "Many tasks, including catheterization, are relegated to nonprofessional nursing help and the new graduate soon finds she has much to learn before she can become a good nurse."

He said that catheterization is not without danger and that despite the most careful technique, infec-

(Continued on Page 40)

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Persons Over 40 Need Glaucoma Examinations

Examination for glaucoma, which may lead to blindness, should be an "indispensable" part of all physical examinations of persons over 40 years, five Memphis physicians have stated.

Persons with chronic diseases, such as hardening of the arteries, high blood pressure or arthritis, especially should be examined for the disease, the physicians said in the October 24 issue of the *Journal of the American Medical Association.*

In glaucoma, which is most prevalent in persons past 40 years of age, tension within the eyeball is increased. The structure contains fluid that keeps the orb from collapsing. The fluid enters through openings in one part of the eye and escapes from others. Glaucoma occurs when the outflow is blocked and the excess fluid builds pressure in the eyeball and damages the nerve cells.

It can be treated and blindness prevented if the disease is discovered early enough. A simple test, tonometry, can show the presence of glaucoma.

The physicians reported a study of 13,155 persons in hospital and nonhospital groups during a two-year period. Tonometer testing revealed 271 cases of subclinical glaucoma not under treatment. During the same period 62 persons who visited the ophthalmology clinic at the teaching hospital of the University of Tennessee College of Medicine were found to have the disease.

The highest rate of glaucoma was found in residents of a home for the aged, where 6.4 per cent of those examined had the disease. The next highest rate (3.4 per cent) was in Negro women visiting outpatient clinics and in Negro males engaged in occupations involving considerable manual labor (3.1 per cent).

(Continued on Page 40)



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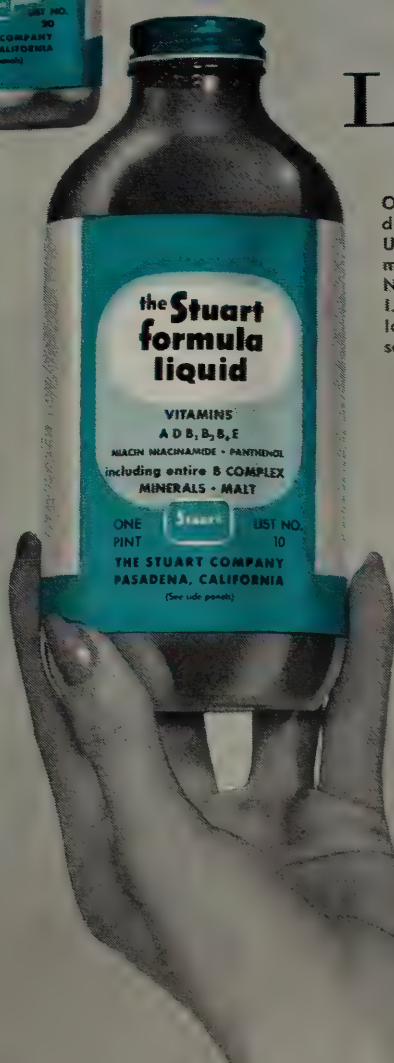
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Points Up Early Signs of Multiple Sclerosis

The nation's general practitioners were urged to be on the lookout for early signs of multiple sclerosis when their patients pay them an office visit.

Multiple sclerosis, commonly called MS, is a tricky disease" to diagnose, and a Duxbury, Mass., physician, writing in the *Journal of the American Medical Association*, outlined a number of practical hints that may alert the general practitioner to recognize the condition in its early stages.

MS usually involves a "hit-or-miss" pattern and is likened to syphilis, which can imitate any disease.

"I have found," said the author, Dr. Walter E. Deacon, "that, clinically, certain signs and symptoms seem to be more prominent than one would expect from a 'hit-or-miss' pattern."

Dr. Deacon offered the hypothetical case of a patient who walked into a doctor's office and complained of sore throat or an upper respiratory infection. The patient is treated, but returns two or three weeks later, complaining of numbness or weakness of an arm or a leg or of visual blurring.

He said that many physicians might "dismiss the episode with a wave of the arm," but actually these

(Continued on Page 48)

Urologist's "Know-How" Aids Surgical Patients

(Continued from Page 24)

tion of the bladder may follow. He cited this as another reason why catheterization should be in experienced hands.

Dr. Nourse said that preoperative and postoperative discussion between doctor and patient was, in his opinion, the best way to help the patient with this distressing problem. Such discussions and suggestions with 2,000 patients, he said, lowered the percentage of those who had to be catheterized from 18.3 to 1.7.

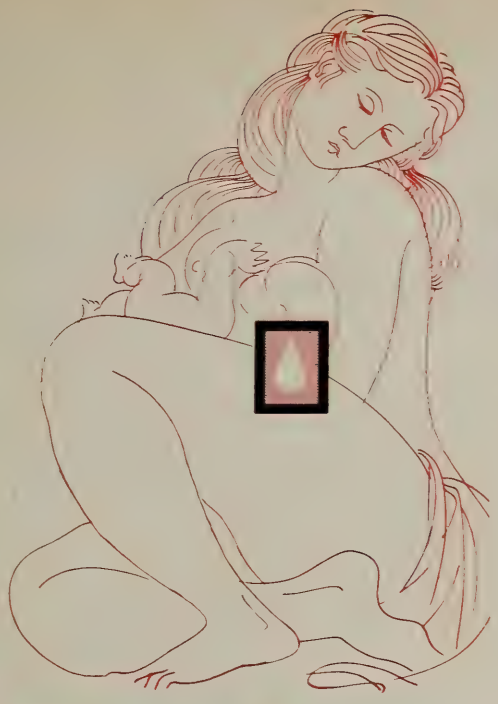
Persons Over 40 Need Glaucoma Examinations

(Continued from Page 36)

The lowest rate was in white women who engaged in occupations requiring "discriminatory visual activity," such as teaching or department store clerking. Their low rate may result from the fact that they have frequent eye examinations and glaucoma is discovered early.

In general the study produced three conclusions: glaucoma occurs more frequently as age increases; it occurs more frequently in Negroes than in white persons, and there seems to be an association between the disease and other chronic diseases, such as arthritis or high blood pressure.

The authors are Drs. Henry Packer, Alice R. Deutsch, Philip M. Lewis, Claude D. Oglesby, and A. C. Cheij.



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1. Macy, I. G.; Kelly, H. J., and Sloan, R. E.; with the Consultation of the Committee on Maternal and Child Feeding of the Food and Nutrition Board, National Research Council: The Composition of Milks, National Academy of Sciences, National Research Council, Publication 254, Revised 1953. 2. Research Laboratories, Mead Johnson & Company.

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Points Up Early Signs of Multiple Sclerosis

(Continued from Page 40)

symptoms could be "the initial onslaught of multiple sclerosis in certain susceptible persons." A careful follow-up examination, especially if the symptoms recur, may reveal changes in reflexes or some muscular atrophy or weakness, he said.

Dr. Deacon urged practicing physicians to be more patient with neurotics who have a multiplicity of such complaints as aches, pains, weakness, inability to cope with everyday chores and dizziness.

For some unknown reason, he said, these people are particularly susceptible to MS. "Usually the patient has visited every physician within a radius of 50 miles. . . . A carefully taken history, however, may reveal a multiplicity of neurological complaints and a careful examination may reveal changes sufficient to warrant a guarded diagnosis of MS."

Dr. Deacon stated that frequently early signs and symptoms of MS show up during pregnancy which is considered a stress state, both mentally and physically. He said that in his own practice he has seen three cases in 16 in which MS first developed during pregnancy.

Dr. Deacon urged all physicians who practice obstetrics to include a careful neurological examination as a part of their general physical examination in order to uncover mild or incipient MS.

"A group of neuromuscular defects are so obviously due to disorders of the central nervous system that a glance at the patient determines that further appraisal and referral is necessary," the Massachusetts doctor said in his article, adding: "These include scanning speech, tremor, obvious dragging of a leg or a wasted arm, and marked gait difficulties."

He said that these defects reflect "the insidious, mild, and transient attacks which escape detection unless the physician is alerted to the possibility of MS and a careful follow-up is performed periodically."

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In its annual comprehensive report on all aspects of medical education, the Council on Medical Education and Hospitals of the American Medical Association announced that the 1958-59 graduating class receiving the M.D. degree numbered 6,860, only one less than in 1957-58.

These two classes were the largest except for the 1954-55 year when the class was 6,977. The increase in that term was occasioned by including as graduates the 50 students completing the intern year then required by Stanford University.

According to the council's report, which appeared in the Nov. 14 issue of the *Journal of the American Medical Association*, 43 medical schools had decreases in the number graduated while 34 schools experienced increases.

Women comprised 5.4 per cent of the graduating class and comprised 5.9 per cent of the Canadian 1958-59 graduating class.

Much of the council's report dealt with educational opportunities for the number of medical students considered adequate to satisfy medical service needs in a vastly growing population.

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(Continued in Back Advertising Section, Page 60)

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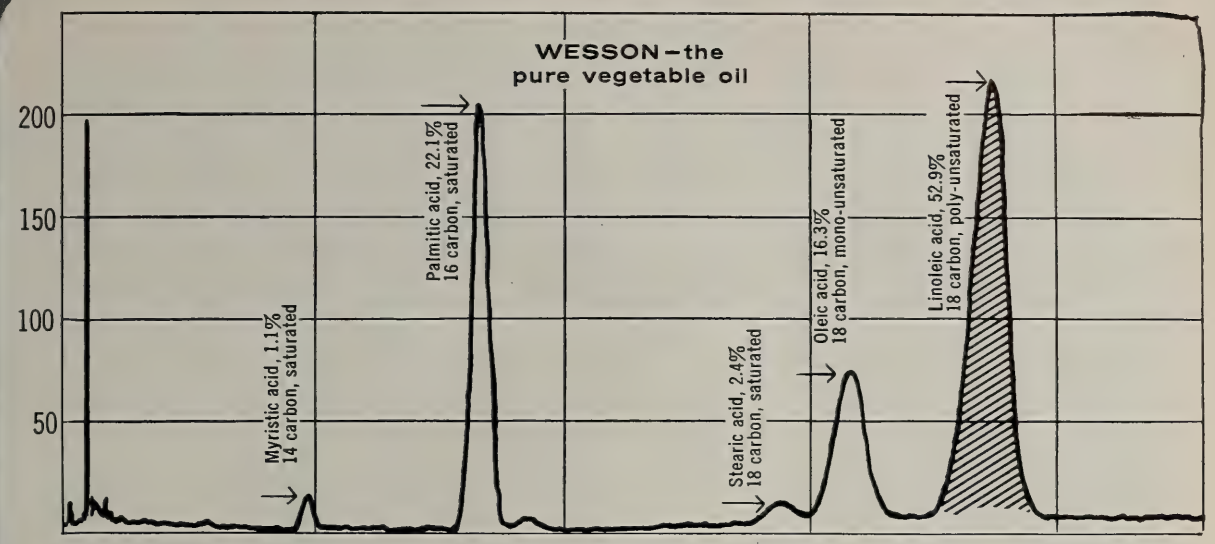
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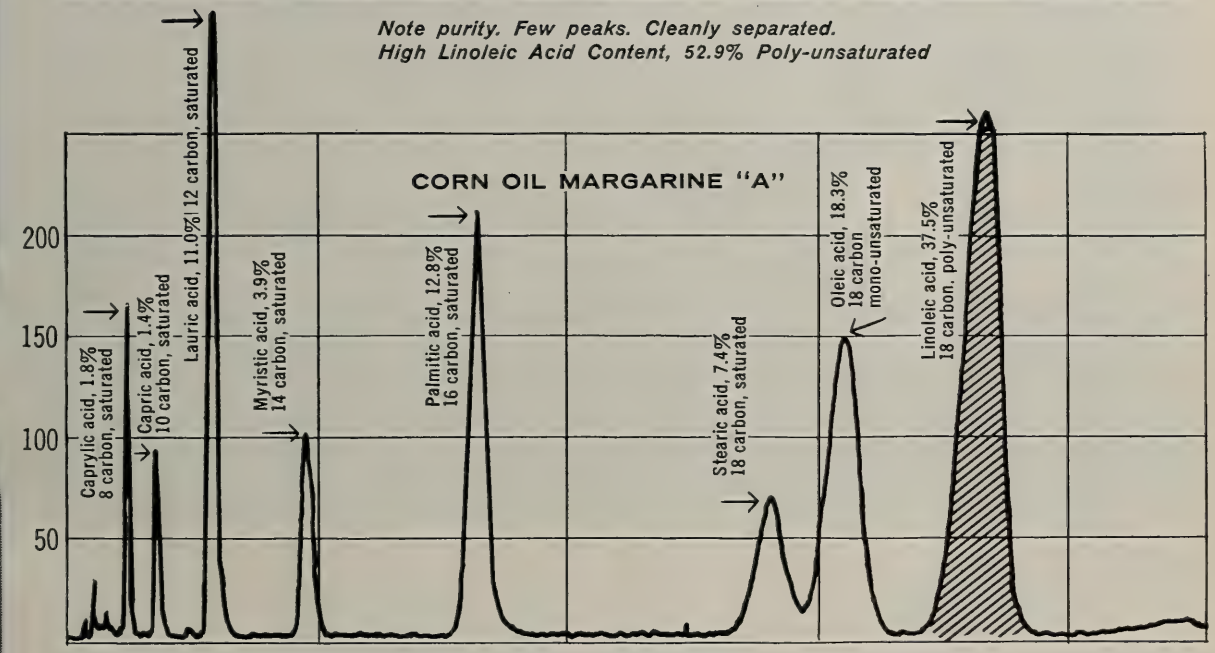
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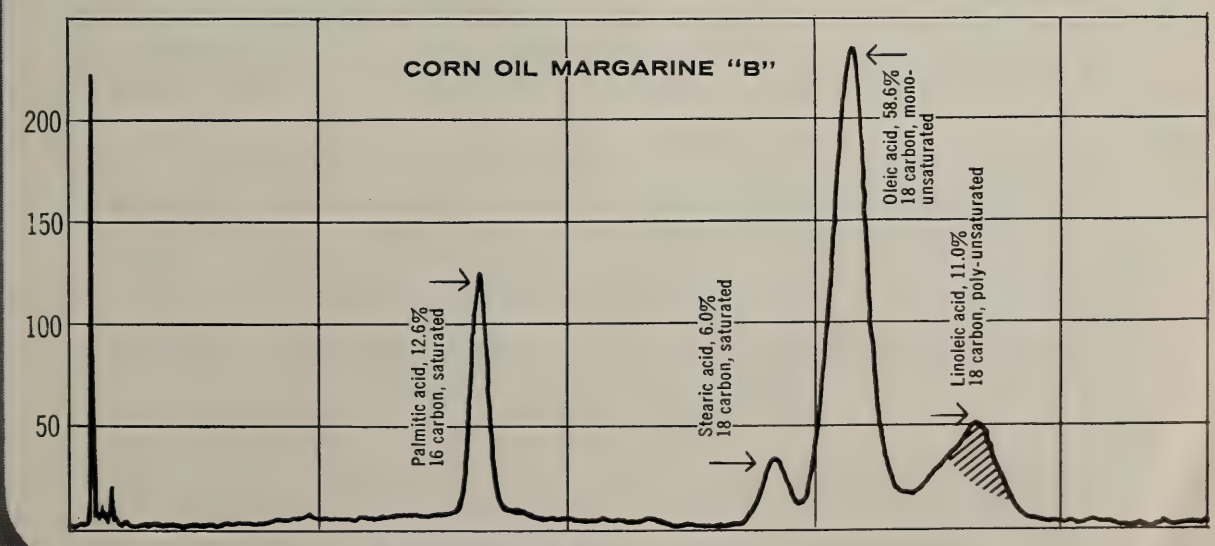
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California MEDICINE

OFFICIAL JOURNAL OF THE CALIFORNIA MEDICAL ASSOCIATION
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VOLUME 92 JANUARY 1960 Number 1

Medicine at Mid-Century

T. ERIC REYNOLDS, *M.D.*, Oakland
President, California Medical Association

IT IS A PRIVILEGE to live in the mid-20th century and to have witnessed the great changes as they have unfolded. I feel especially lucky to have lived as a United States citizen during this time—perhaps no people in man's history have been more fortunate. Without attempting the role of social philosopher, I should like to record some observations, just as a physician along the way, and suggest a few deductions that might be made from them. It may well be that too many physicians are so busy with the practice of medicine that they never take time to think about it.

Physicians and friends of medicine often ponder the curious antipathy of certain segments of society to medical practice. Why is it that a highly trained and lengthily educated profession, notable for self-discipline, is so frequently assailed in conversation and in the press?

To explain this anomaly, some go so far as to say it is a part of a gigantic conspiracy to overthrow and discredit private enterprise and usher in the complete socialist state. I doubt this, although I have recently heard members of Congress state that they thought it was a socialist conspiracy. In any case, the mistrust of medicine is widespread, and, at times, a little mystifying. How can it be—we ask—that a professional group which strives to promote medical progress through research, which places no limit upon its own services, which contributes so much of its time without remuneration, can be condemned as commercial, or even mercenary? What about the endless phone calls any time of day or night, the notes to schools, employers, jury commissioners, the medical history résumés to other doctors, the conferences with relatives, none of them services that carry a price tag? Are such services not appreciated? Can it be the "bad apple in the barrel" that brings about the condemnation of a whole profession? Or can it have been the evolutionary development of our present economic climate, including the medical insurance device, that has altered the public image of the practicing physician?

Perhaps it might help to examine the question in historical perspective, to see medicine as it is—not necessarily as we might wish it to be—as an integral part of a vast and revolutionary development which has already altered our political and economic environment to an extent perhaps inconceivable at the turn of the century.

Those of us here today are witnesses to not one but several major revolutions, on a world-wide scale. Social changes have occurred in the past century more far-reaching than any in the history of man. In medicine, specifically, concepts and procedures have changed more in the past 75 years than in the period of 5,000 years preceding them. Ours is a time of flux and excitement, and, as was said by Dr. Edwin L. Crosby, director of the American Hospital Association, quoting a friend of his: "It is exciting to live in a time of revolution. It is tragic not to realize it."

Let me elaborate. In only a few years we have wit-

An address before the annual Western Conference of Medical Care Plans, November 8 to 12, 1959, Honolulu.

nessed the end of a centuries-long period of colonialism and the exploitative mercantile philosophy served by it. We are seeing the emergence of racial groups, long believed incapable of self-government, into an area of self-determination, and of both economic and political significance. As United States citizens, we are engaged in a colossal cold war, living in a garrison state costing us 4,013 millions a year in tax dollars to maintain. We have just seen at close range a representative of an ideology different from our own which openly challenges our system. Who knows what the long range effect of this tug-of-war may be, or how the balance of power may change—as it has changed so many times since this century began? Compared with what we know of the first 14 or 15 centuries A.D., ours is an historical period of almost incredibly rapid change.

The United States, in the early 19th century, was essentially a self-sufficient agricultural economy of handcraft production. Now it is a vast complex of industrial capitalism, characterized by bigness—big industry, big labor, big banking, big agriculture and big government. I am told that one out of eight employed persons works for some division of government—city, county, state or federal.

The elaboration of skills necessary to support our industrial complex has led to an almost fantastic interdependence of people on each other. This seems likely to intensify. Automation will almost certainly lead to shorter working hours and more leisure, and this, in turn, will alter patterns of social behavior. Technological imperatives will tend to make the less able individual just about unemployable, and throw the burden of his maintenance upon the state. Mass audio-visual media, rapid communication and transit have already changed our social mores; and refrigeration has changed our diet.

In a word, the political and economic environment has tended to change the position of the individual in society. It is no longer the hope or the fashion of the individual to "go into business for himself." The tendency is to go to work for corporations or government; and more emphasis is placed (and most significantly by the younger, beginning worker) on security than upon private initiative. Rising taxes and other factors have tended to bring about the general practice of personal deficit spending for personal goods and services. "Fringe benefits" are eagerly sought by both labor and management to provide the security once maintained by personal savings and investments.

Nearly everyone today lives on next week's paycheck, and the older ideas of frugality and personal responsibility have made way for a newer form of providence—insurance.

Population patterns have changed too, in the maelstrom of revolution. Since 1900, the *rate* of population increase has more than doubled. Today, we may expect population to double in less than 50 years, as opposed to the former 100 years required to complete the cycle. The *net* population *increase* in the world today is estimated at 5,000 per *hour*.

Life expectancy has also increased from 47 to 69 years. However, the maximum longevity for humans has not changed much. In other words, the proportion of centenarians in the general population has probably not increased. But, very significantly, the ratio of people over 64 has almost doubled since the turn of the century.

COST UP, AND VALUE TOO

All these things profoundly affect the economics of medical practice. New techniques of diagnosis, surgery, chemotherapy, psychiatry, let alone sanitation, immunity and epidemiology have made medicine very much more effective and socially valuable. But they have also made it more expensive in certain respects, although, if considered in terms of expenditure of time and life, it is certainly less expensive than in more primitive days.

Part of the increase in cost can be attributed to the over-all rise in prices, but, mainly, the increased costs are due to the increased variety and effectiveness of medical services. And, while it is the tendency to lump together all expenses incident to an illness under the general heading of a "doctor bill," only about 25 to 30 per cent of the amount reflects professional services as such. It was not particularly expensive to die of diabetes 50 years ago, but it is fairly expensive to live with it for 50 years today.

Paralleling explosive activity in general scientific research, the discovery of viruses, the splitting of the atom, the conquest of interplanetary space, there has been a revolution in the scientific aspects of medicine. This was inevitable, since medicine does not exist in a vacuum but is, and must be, an integral part of the total environment, giving meaning and taking meaning from the whole complex.

But physicians are in an ambivalent position, culturally derived from, first, the tribal medicine man —the witch doctor, if you please—and second, the true scientist. Medicine is not a pure science, objectively aloof from human needs and hopes; and perhaps it never will or should be, human nature being what it is. As has been said before, the sound of the sorcerer's drum is still heard in the background, and perhaps a certain amount of art and magic are necessary to the practice of medicine. This dual derivation may account for the fact shown by surveys that, while people state they are very happy about their own doctor, they express a much lower regard for

doctors in general. Their own is a miracle worker perhaps?

Along with the scientific advances of some aspects of medicine, there has developed on the part of the public almost a religious zeal for the benefits of health, and an interest—sometimes wholesome and sometimes morbid—in how these benefits are obtained. Every medium of human communication deals in some way with items relative to health, and many people have developed an unrealistic notion of what health services can provide. And, from this preoccupation with the benefits of health, there has clearly emerged the concept that the means to attaining and preserving human health are a basic human right. Health is no longer thought of as a matter of good fortune or divine benevolence. It is a civic right.

What society wants, it usually gets in one way or another. At the moment, it is dallying with a way that has been so widely adopted as to have become a fixture in world economics. This is the concept that government subsidies can provide otherwise unattainable benefits. Even the most fire-breathing free-enterpriser seems to regard just a *little bit* of socialism, especially if it contributes to his own interest and travels under an assumed name, as all right: a special tariff, a cost-plus government contract, a fair trade agreement to provide a floor under prices, crop supports (I believe we spend about a billion a year just for the *storage* of crop surpluses, which will be destroyed later), not to mention the various social insurance programs and other devices which guarantee to pay losses with taxes.

Of course, with subsidy go regimentation and controls. It seems to me that the sooner medicine realizes this, the more chance it will have to pitch in and plot the course its future will take. Standing around and wringing our hands, deploring and condemning every social and economic change, can only result in losing the war to maintain our professional freedoms and integrity, even though we may win a few battles along the way. So far as I know, the United States is the only Western democracy that still has a basic nonpolitical medical economy, and ours continues to receive dilutions.

Voluntary prepayment of health insurance is the only line of defense which exists between nonpolitical medicine and total national health insurance. Yet, most physicians are apathetic toward it. A few obstructionists are hostile to it in principle, and a few are willing to participate in it only because it gives them an opportunity to chisel.

Should government health insurance come, I suspect that the patient will suffer more from it than the physician. In America we have become used to medical luxuries and a good deal of coddling. I will be bold enough to state I think we have more people who are overtreated than undertreated in the United States. I would hazard a guess that one-fourth of the population receives three-fourths of the medical attention . . . largely because of unrealistic attitudes, fears and anxieties, constitutional inadequacy, and the hypochondriacal tendency to turn to the "medicine man image," rather than because of medical science. These people must be cared for, and it is medicine's responsibility to do so. To a great degree, it is this element of the population which incurs the expenses that force plans and companies to raise rates. This element requires most of the tests to rule out obscure and bizarre disease entities, and to fortify the physician against suits for malpractice. It costs a lot of money. It is bad enough even under the controls offered by such devices as deductibles and co-insurance. What will it be when payments come mostly from tax monies handled through politically manipulated agencies? So we believe medicine is too expensive *now?*

Mid-century finds us in a time of ferment and turmoil in human affairs and a time of change in medicine. How we as physicians, and the plans as medical fiscal agencies, react to the forces at work in our environment will surely determine the nature of future changes.

Prepayment plans are medicine's device for reconciling new economic concepts with traditional and largely personalized medical care. People like this kind of care—nearly every index tells us so. Must we lose it? I wonder. Nearly 70 per cent of the poplation has some form of health insurance protection. Many of the remainder are in situations which preclude it. Certainly, not all of the covered population look upon voluntary prepayment as just a stop-gap measure while they wait for political medicine. Most of them embrace it because they don't want political medicine or to have to bear the cost of it.

But we have far to go in the improvement of medical prepayment and health insurance. The product must be strengthened if it is to stand up to the social and economic pressures of the future. It seems to me that the people are on our side; but physician apathy as well as *time* are against us.

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Pulmonary Hyaline Membrane Disease

A Panel Discussion

- **Pathogenesis BENJAMIN KAGAN, *M.D.***
- **Pediatrician's Point of View . . . ARTHUR H. PARMELEE, SR., *M.D.***
- **Obstetrician's Point of View . . . EDWARD B. CANTOR, *M.D.***
- **Anesthesiologist's Point of View . . MILTON J. MARMER, *M.D.***
- **Internist's Point of View JACK LIEBERMAN, *M.D.***

Pathogenesis

BENJAMIN KAGAN, *M.D.*, Los Angeles

THERE IS A GREAT DEAL of data available on the pathogenesis of hyaline membrane disease—some of it conflicting. Originally it was thought that the eosinophilic membrane could be aspirated amniotic fluid. But hyaline material cannot be demonstrated in amniotic fluid. In addition, if amniotic fluid is put into the tracheal tree of animals—even very young animals—very few develop pulmonary hyaline membranes. However, if amniotic fluid is put into the trachea of young animals and then they are exposed to high oxygen concentration, hyaline membrane develops in the lungs of a very high proportion. It should be noted, though, that in the experiments in which this observation was made, the oxygen concentrations were much greater than used to be used for babies before oxygen was inculpated as a factor in retrolental fibroplasia. Nevertheless, we have to consider the possibility that the combination of aspirated amniotic fluid and a high oxygen concentration may be a factor. Dr. Edith Potter[8] some months ago told me that there appeared to be a definite decrease in the incidence of hyaline membrane disease. At that time, she thought possibly it was related to the fact that they were using much less oxygen; but later, in a letter to Dr. Cantor, she said she was unwilling to intimate with any certainty that decreased use of oxygen might be relevant. Other observers have observed no decrease in incidence in spite of reduced use of oxygen.

Well, if hyaline doesn't come from aspiration, then perhaps it is from exudate. Most of the hyaline material is not really in the alveoli. Most of it is in the terminal bronchioles. It tends to obstruct the terminal bronchioles and then we see areas of atelectasis—sometimes of emphysema, but mostly of atelectasis perhaps secondary to the obstructing hyaline membrane material. Perhaps it is not a complete exudate but simply plasma. If so, then perhaps it is fibrin. Fibrin, when stained in the same way, is eosinophilic and could look just like hyaline membrane. Gitlin[5] and associates have good evidence that a large portion of the material is indeed fibrin. On the other hand, a high proportion is mucoprotein, much higher than the proportion of mucoprotein in plasma. The Canadians have some good evidence suggesting that the material isn't just plasma but rather a concentrated exudate passed through the capillaries of the bronchial wall. It could be a combination of things. For example, perhaps amniotic fluid acts like a thromboplastic material on exudation of plasma and causes coagulation and clotting of the plasma more rapidly. Perhaps that combination is responsible for the rapid formation of hyaline membrane. This idea would fit certain other things we know about this entity. For example, hyaline membranes are not present in stillborns. They occur only in infants that have taken a first breath. Hence, it is conceivable that something happens after the baby is born and takes a first breath—that there is then plasma exuding through the capillary walls into the lungs, that there is amniotic fluid with thromboplastic activity causing coagulation of the protein, and fibrin is deposited. Where the mucoprotein comes from in such high concentrations we don't know.

Lieberman[6] (a member of the panel) has done some fascinating work in this field. His point was this: Perhaps it is not too abnormal for fibrin to appear in the lungs. Perhaps it is gotten rid of by an enzyme system which involves plasminogen. This supposes a plasminogen precursor or activator and that the plasminogen has lytic action on whatever fibrin forms. Trouble occurs if lysis does not take place, perhaps because of absence of or relative absence of plasminogen or its precursor in the lung. Lieberman conjectures this deficiency may be genetically related. (We do know that there are mothers who have not just one baby with hyaline membrane disease but two or three.) He therefore suggests that there is an absence of the enzyme system which would normally reduce fibrin and get rid

Submitted September 28, 1959.

of it as rapidly as it forms, and that the absence may be genetically determined.

Certain things are bothersome about this idea which I hope Dr. Lieberman will comment upon. It can't be a dominant genetic factor, because mothers who have babies with this disease often have subsequent babies who don't have it. In addition to that, I understand that Craig[2] in Boston exposed hyaline membranes to plasminogen-like substance and found that it took a very high concentration over three hours to reduce the fibrin. It would seem that in babies there could not be enough plasminogen present long enough to bring about lysis of hyaline membranes. Of course, its presence early might have a preventive effect. Perhaps there is an inactivator present in concentration sufficient to inactivate the enzyme or its precursor and thus permit the formation of hyaline membrane.

It is possible that none of these conjectures apply. The hyaline membrane formation could be a terminal phenomenon. We know that hyaline membranes are formed in adults, for example, who have had influenza, sometimes in rheumatic fever, in radiation pneumonia and in various poisonings such as war gas poisoning. So, perhaps the membrane is, as some observers like to call it, an eosinophilic herring—not the main problem.

Some quite fascinating reports were given at a recent meeting of the American Pediatric Society and the Society for Pediatric Research. There were four individual reports from Clement Smith's group[1,3,4,7] in Boston. They catheterized the hearts of infants with clinical hyaline membrane disease and were able to demonstrate a functional ductus, a very patent ductus with a good flow of blood from one side to the other. They could not demonstrate these ducti clinically. In addition, they found that the pressure in the pulmonary arterial system, as well as on the systemic side of the heart, was low, but the pulmonary vein pressure was high. Now if you think about that for a minute, it suggests that the baby might be in cardiac failure—output failure on both sides, left and right. But they digitalized such infants and observed no benefit from the digitalization. That still doesn't rule out the possibility that there is some cardiac failure. At any rate, facts from these data establish that the arterial pressures are low. Now if the venous pressure is high, this again would fit with the possibility of transudation or exudation from the capillaries into the lung itself.

In addition to this, they found that blood pressure in the arm drops transiently but decidedly about a half hour after birth in infants who develop respiratory distress.

In a very interesting study reported from Rochester,[9] New York, it was noted that there was a pronounced increase in blood volume in normal babies, as much as 20 per cent, within three to five hours after birth—not just in the plasma portion but in the red cell mass as well. Where this extra blood comes from is in some doubt, but it would appear to come probably from the lungs. The lungs are fairly solid in utero and perhaps contain a lot of blood. After they are aerated some of that blood is squeezed out in the first 3 to 5 hours, which would act like a transfusion, the infant suddenly having 50 or 60 cc. more of circulating whole blood. Now keep this report from Rochester in mind in considering one from Pittsburgh[10] which was also presented. In the latter, it was found that in full-term babies there were more respiratory difficulties when the cord was clamped early than when it was clamped late. With premature babies the converse was true. It was thought that the reason might be that late clamping in premature babies gave the baby an additional 50 to 60 cc. of blood from the placenta and cord. If this were in addition to the 50 or 60 cc. from the lung that the Rochester group noted, the effect would be quite an increase in blood volume. Infants born by cesarean section are known to have an excess of body water and more hyaline membrane disease. To conjecture further, supposing a large increase in blood volume, a large ductus and a drop in both systemic and pulmonary arterial pressure, the infant might get quite a pooling of blood in the lungs, which might make for exudation or transudation of plasma into the alveoli and lead to the formation of a hyaline membrane.

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Pediatrician's Point of View

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ALTHOUGH THE SUBJECT is hyaline membrane disease, I prefer the epithet hyaline membrane atelectasis, for it is atelectasis that actually causes the trouble; the hyaline membrane happens to be the disturbing feature in the causation. Atelectasis of the newborn has long been recognized as a very serious threat to the survival of newborn infants, particularly those born prematurely. This term used to be used, and often without qualification, on death certificates as an adequate diagnosis, and is still so used by some physicians. This practice was not seriously challenged until 1933, when Farber and Wilson[1] published the results of a study of atelectasis of the newborn in which they called attention to the many and varied causes of atelectasis and made the statement that a diagnosis of atelectasis was not a diagnosis at all without a qualifying statement as to etiology. I think that more and more of us are finding that this statement is true. There are some cases of atelectasis in the premature that have practically no cause excepting prematurity. That is a little different, because the lungs in those very small prematures are uninflatable. Farber and Wilson also described a condition which I think now we would call hyaline membrane. They discussed obstruction to the flow of air to and from the lungs caused by aspiration of amniotic fluid, making particular mention of the vernix in this aspirated material in the bronchi, and noting that squamous cells were present in the lungs of term infants but not in the lungs of infants born quite prematurely. The material that they called vernix (also known as asphyxial membrane) is what is now called hyaline membrane. By asphyxial membrane they meant that this material, plastered against the wall of the alveoli, alveolar ducts and respiratory bronchioles, interfered with the exchange of gases between the capillaries and the inspired air.

We are beginning to know something about the clinical history and the relative seriousness of atelectasis of this type. We know, for instance, that it occurs with greatest frequency in infants born prematurely, in infants born of diabetic mothers and in infants born by cesarean section. We know also something about the symptomatology. It has as a rule a rather uniform pattern (there are some exceptions). The babies usually breathe normally at birth, or seem to, and their respirations are well established without any particular difficulty or symptoms of respiratory distress. Symptoms of respiratory distress do not as a rule become very clearly apparent until several hours—maybe three, four or five hours—after birth. However, studies have shown that if the respiratory rate of these infants were being watched and counted constantly, evidence of trouble might be noted very much earlier. According to Dr. Herbert Miller[3] of the University of Kansas, the respiratory rate in most instances definitely tends to increase very shortly after birth and continues to increase until it is abnormally high; and by that time the previously mentioned classic signs are present.

The signs of atelectasis due to hyaline membrane disease differ in some respects from those of atelectasis of other types. In addition to the rapid breathing, there is intercostal retraction and an audible expiratory grunt, and in many cases rather definite retraction of the lower sternum. These signs persist and tend to increase in severity. Cyanosis is likely to be present at some stage as time goes on, sometimes becoming quite severe and relieved only by oxygen administration.

One thing that impresses me more than anything else as I have observed children with atelectasis due to hyaline membrane is the tremendous amount of work they do in order to breathe, and it is a matter of great wonder that they can keep it up hour after hour.

Increasing the rate of respiration and the depth of respiration is necessary in order to get enough air to overcome the dead space and reach the alveoli for sufficient oxygen and exchange. Survival depends largely upon the strength of the infant and his ability to carry this tremendous work-load long enough for the process to spontaneously resolve itself. There is an interesting clinical phenomenon in connection with the labored breathing: If the baby is strong enough to carry this load long enough, then toward the end of the third day or the beginning of the fourth day or about that time, there seems to be a rather abrupt and definite improvement in his clinical condition, although sometimes rapid respirations will continue for a time and often the roentgenographic abnormalities persist a little longer. The sudden resolving of this process is reminiscent of the crisis in the normal course of lobar pneumonia.

X-ray films are of some help in diagnosis. Peterson and Pendleton[4] published an article in the *American Journal of Roentgenology, Radiology, Radiological Therapy* and *Nuclear Medicine* in 1955, describing the roentgenological appearance of atelectasis in hyaline membrane syndrome as being a fine, diffuse, reticulogranular or ground glass pattern in contrast to the coarse and irregular pattern seen in the fetal aspiration syndrome. They also noted that while emphysema, interstitial emphysema or air trapping and pneumothorax and pneumomediastinum are rather commonly seen in the atelectasis of the aspiration type, these conditions are virtually

Submitted September 28, 1959.

not seen at all in atelectasis due to hyaline membrane. Also, in making the diagnosis, all of us appreciate how important it is to know something about the history—history of the pregnancy, of the labor and of the delivery. If a baby is born of a diabetic mother—often such babies are born somewhat before term, after 36 to 37 weeks of gestation, and often by section—we are facing the possibility of a baby that might have hyaline membrane atelectasis. Also with a baby born prematurely we are facing that possibility. Toxemia is another condition in which hyaline membrane is the cause of one type of atelectasis that is troublesome. We often make a diagnosis of hyaline membrane syndrome on the symptoms alone and we have no way of knowing for certain that the atelectasis is due to hyaline membrane except in the case of babies that die and are examined postmortem. However, if the roentgenological symptoms are of the previously mentioned rather uniform pattern, we may possibly be aided in making, with some assurance, a diagnosis that otherwise would be rather speculative.

As far as treatment is concerned, prayer, I think, is helpful. There are some things we can do prophylactically—I mean that if it is possible to prolong gestational age and make the baby who is born prematurely less premature than he might have been, we have done quite a little. If we can avoid doing cesarean section except when it is absolutely necessary, we can do quite a little more. Immediate care of the baby after birth, I think, is quite important —making sure that postural drainage is effected immediately, and that nasopharyngeal suction is applied. If we wish to follow Sidney Gellis'[2] recommendation that the stomach contents be removed to avoid the possibility that vomitus might be drawn into the lungs later, there is certainly no reason not to do so. The baby should be placed in an incubator to keep it warm and left in a posture to aid drainage, with the head slightly below the rest of the body at an incline of about 15 degrees. It is probably best to turn it on its side rather than on its back. We give the baby nothing by mouth for the first 24 hours or, probably preferably, even 48 hours, especially if there are beginning signs of respiratory difficulties. As to active treatment, there are some things that we can do: We can use mist nebulization to keep the atmosphere moist or supersaturated, and if the baby is cyanotic we can give it oxygen. That is probably about as much as can be done.

I would like to end up by saying that, as far as treatment is concerned, I would recommend a large measure of intelligent neglect or what might well be called masterful inactivity.

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Obstetrician's Point of View

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HYALINE MEMBRANE DISEASE has been indicated as the causative agent in from 15 to 50 per cent of neonatal deaths. Approximately one of every 400 newborn dies of this pulmonary syndrome and it is estimated that 25,000 deaths are caused from this condition each year in the United States. In a series of neonatal deaths from 1939 to 1949, Potter[5] found hyaline membrane disease to be the only significant pathological change in 40 per cent of the infants. In a recent communication, Dr. C. A. Smith[8] of Harvard University, said that this condition was the largest single cause of neonatal mortality; the incidence in premature neonatal deaths was about 50 per cent.

The most widely circulated theories as to cause have involved aspiration of amniotic fluid, emphysema and atelectasis, hyperoxia, hormonal influence, infection, metabolic change, protein derived from blood, cardiac failure, vagal nerve dysfunction and a deficiency of the precursors of fibrinolysin.

Most authorities are in agreement that prematurity is the one great single contributing element in neonatal deaths due to this syndrome. Infants of diabetic mothers have also been shown to be especially likely to develop this condition. There is a great deal of controversy as to whether there is any significant increase in the incidence of hyaline membrane disease in infants delivered by cesarean section. Rodgers and Gruenwald[7] are of the opinion that infants born of mothers with antepartum bleeding also have a greater predisposition toward the development of hyaline membrane.

Thus the role of the obstetrician in combating this condition is first and foremost to do all he can to prevent prematurity. In the case of diabetic mothers, complete cooperation with a competent internist and

Submitted September 28, 1959.

the judicious choice of the optimum time of interruption of pregnancy, as well as intensive care of the newborn infant, is most important. In addition factors contributing to antepartum bleeding should be nullified as far as possible. Finally cesarean section should be done only when there are definite indications and each case should be judiciously selected.

In a review of our experience at Cedars of Lebanon Hospital from the years 1951 to 1957 it was noted that there were 36 cases in which hyaline membrane disease was observed at autopsy. There was no evidence that the age of the mother, analgesia, anesthesia, length of labor, Rh factor or serologic test reaction had any relation to the disease. In 28 cases the mothers were primipara or para I. As to the length of labor, the longest was a first stage lasting twenty and a half hours with a second stage of five minutes, and the shortest was a one-hour first stage and a 17-minute second stage. In none of the cesarean section cases was there a course of labor. Twenty-six of the infants were boys and ten were girls. No references could be found in the literature relating to sex distribution. Rodgers and Gruenwald[7] reported on five twin gestations in a series of 56 infants at Kings County Hospital from the years 1949 to 1952, all delivered prematurely and vaginally and all autopsied. In one case hyaline membrane disease was present in both twins. In the remaining four cases only the first twin was affected. In the Cedars of Lebanon series there was only one case associated with multiple pregnancy. The infant affected was the first delivered and delivery was vaginal. Delivery was by cesarean section in 11 of the 36 cases, vertex presentation in 19 cases, breech in five and by version and extraction in one. Twenty-nine of the 36 babies weighed less than 2,500 gm. Of the seven weighing over 2,500 gm., three were delivered by cesarean section and four vaginally. There were 1,767 cesarean sections done in the period in which the present series accumulated. Thus the incidence of hyaline membrane disease in cesarean section cases was 0.6 per cent, against 0.2 per cent in 12,656 vaginal delivery cases. Question arises, of course, as to what the incidence of the disease might be in both categories if the prematurity factor were the same in the cesarean as in the vaginal group.

In the cesarean section deliveries there was one case in which a rising titre of the Rh was a factor, one in which a diabetic woman was having a second delivery by this means, and one in which the operation was done because of rupture of the uterus.

Fibrinogen levels in the mothers were not determined in our series. In a recent communication, Potter[6] of Chicago Lying-In Hospital stated that there were no abnormalities of fibrinogen levels in mothers of any infants with hyaline membrane disease. Cook[1] at the Children's Hospital in Boston is reported trying to get some information on the relationship between maternal fibrin factors and this syndrome, but at present the series is not very large.

As to the question of a tendency to sibling incidence, none of the mothers in our series of 36 cases had infants at a previous birth with hyaline membrane disease. In three cases in which the mothers had had cesarean section in earlier pregnancies, the previous infants had had no pulmonary distress in the hospital and had been in good condition on leaving. However, subsequent to the time of the series here reported, a primipara (who incidentally had Stein-Leventhal syndrome) promptly became pregnant after a bilateral ovarian wedge resection was carried out. Delivery was carried out, after 40 weeks of gestation, by cesarean section because of cephalic-pelvic disproportion. The infant weighed 2,894 gm., and died of hyaline membrane disease. Cesarean section was carried out in a second pregnancy at thirty-nine and a half weeks, and again the infant with a weight of 2,178 gm., died of hyaline membrane atelectasis in the neonatal period. In each instance, the infant's head was delivered into the abdominal wound as is my usual practice, using the left hand as a vector, and the oral pharyngeal area was immediately aspirated with a soft rubber catheter attached to a 10 cc. syringe before the body was actually extracted. The stomach was then aspirated. Neither infant had evidence of respiratory distress when sent down to the nursery. Respirations and actual crying of the infant took place in each case within 60 seconds after birth. Spinal anesthetic was used for both operations.

On reading my report of these cases, D. J. McSweeney,[3] professor of obstetrics at Tufts Medical School, reported on a patient who had had cesarean section four times. The first was done because of cephalic-pelvic disproportion. The infant weighed 7 pounds 10 ounces and lived. The second pregnancy was terminated by elective section 17 days before the estimated day of confinement. The baby, whose weight at birth was 6 pounds 8 ounces, died 72 hours later of hyaline membrane disease. The third pregnancy was terminated 24 days before the estimated day of confinement because of beginning labor and extreme tenderness in the lower abdomen. The birth weight was 6 pounds 3 ounces. The infant died of hyaline membrane disease 16 hours after birth. In the fourth pregnancy elective cesarean section was done at 39 weeks. The infant, which weighed 6 pounds, died in 30 hours of hyaline membrane disease. Competent pediatricians were at each operation and took over the care of the infant immediately.

The relationship of cesarean section to the inci-

dence of hyaline membrane disease is a subject of a great deal of debate. Furthermore, the effect of labor before cesarean section is also a subject of controversy. Labor did not occur in any of the 11 cases in the Cedars of Lebanon series in which delivery was by cesarean section. However, the Harvard group[8] in a recent communication said, "We have not observed that section during labor has in itself a different mortality in the infants than in other cesarean section, *per se*," but that "of course, as everyone knows, the situation for which the section is performed is probably a larger factor than the section itself."

In answer to a recent inquiry, Dr. Howard C. Taylor Jr.,[10] of the Presbyterian Hospital said, "There appears to be a somewhat higher incidence of HMD [hyaline membrane disease] in cesarean section deliveries, but we cannot be sure that this is not related to prematurity."

Strang[9] reported on 287 cases of cesarean section in which there were no complications of pregnancy or labor other than cephalic-pelvic disproportion or preeclampsia. Of 251 mature infants in the series, five died, three owing to congenital malformations and two of massive pulmonary hemorrhage. There were no deaths due to hyaline membrane disease. The corrected fetal mortality was 0.8 per cent for mature and 19 per cent for premature infants. This was approximately the same incidence as was associated with vaginal deliveries during that period. The morbidity of the infants delivered by cesarean section was also studied and there were one mature and two premature infants that had an episode of respiratory distress, requiring oxygen and lasting 12 to 24 hours. All completely recovered. One mature infant developed irritability which was controlled by sedation and ultimately abated. The time it took after birth for respirations to become regular varied from 1 to 13 minutes, the average being 5 minutes. This of course was longer than in those delivered vaginally.

What causes this difference in the development of respiration? Is it the anesthesia, or is it additional fluid in the naso-oropharyngeal or gastric contents? Montgomery[4] suggested that oxygenation of the blood may be delayed in such cases. Holland and Young[2] expressed an opinion that the blood pressure may be lower initially than after a vaginal delivery.

Thus when cesarean section is being considered, the question arises: Are we justified in letting our decisions become influenced by the presumption that hyaline membrane disease is more likely to develop if delivery is to be performed abdominally.

Finally there is some controversy as to the value of routine aspiration of the gastric contents of infants delivered by cesarean section. The Harvard group[8] takes the following position: "The gastric aspiration of infants delivered by cesarean section is carried out rather less faithfully than formerly, as we have observed less effect of the procedure than Dr. Gellis and his co-authors did when they recommended this some years ago. Drs. Gellis and Hsia themselves indicated some dissatisfaction with the effectiveness of gastric suction in their Review of Infants of Diabetic Mothers." Taylor,[10] of the Presbyterian Hospital and Potter[6] of Chicago Lying-In said that they do not perform routine gastric aspirations on any infants in their institutions.

We as obstetricians must extend ourselves to finding every possible means of preventing prematurity. Diabetic mothers should be brought as close to term as possible and their infants should be treated as though premature, regardless of birth weight or length of gestation. Patients should be judiciously chosen for cesarean section, with clear-cut indications; and the infants should be given special care if regular respiration does not develop within 5 minutes. If it is longer delayed, definitive therapy such as tracheal catherization should be carefully performed, or laryngoscopic instrumentation by an expert in aspiration should be done. The infant should then be under the constant supervision of a competent pediatrician. The obstetrician, the pediatrician, the anesthetist and the laboratory researcher must all combine to meet the challenge. Then perhaps in the near future as much progress will be made in the decrease of incidence of hyaline membrane disease as there has been in retrolental fibroplasia and poliomyelitis.

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Anesthesiologist's Point of View

MILTON J. MARMER, M.D., Los Angeles

EVERYONE WILL AGREE that anesthesia, per se, has little to do with hyaline membrane formation. However, what happens after the administration of an anesthetic may affect both the mother and the baby. The very nature of the disturbances that may be produced may set the stage for hyaline membrane disease.

The onset of respiration in the newborn child sometimes can lead to a false sense of security in the physician. Whether by vaginal delivery or cesarean section, the baby is born and takes its first breath. But then sometimes five minutes later the infant has not taken his second breath. This occurrence of secondary apnea is a perplexing problem. To wait too long to correct it, exposes the infant to hypoxia.

The inability of some premature infants to continue breathing after the prompt onset of respiration may be due to anoxia, superimposed on the immaturity of the pulmonary capillary bed. Respiratory failure in the newborn is generally due either to central nervous system failure which leads to apnea, or to peripheral failure of the lungs or chest structures. The latter most frequently takes the form of hyaline membrane disease. In this condition, the infant breathes initially. Shortly after birth he begins to have respiratory distress manifested by progressive sternal and intercostal retraction and an increase in the respiratory rate. This gradually becomes worse during the ensuing 12 to 36 hours, going on to cyanosis, carbon dioxide retention, respiratory insufficiency, respiratory muscle failure and death.

Infants with hyaline membrane disease work hard to breathe. Despite all efforts they have inadequate gaseous exchange. The hyaline membrane material in the lung is fibrin and an important factor contributing to a fibrinogen exudate is the increased pulmonary capillary pressure. The respiratory center of the newborn and especially the premature infant cannot endure an extended period of hypoxia. Profound respiratory depression and apnea may also be a result of the combined effects of sedative, analgesic and anesthetic drugs, plus low pO_2 and high pCO_2.

Let us look for a common denominator somewhere. Babies are born prematurely. Babies are born of diabetic mothers and babies are born by cesarean section. Among the many indications for cesarean section are fetal distress, abruptio placenta and placenta previa. The common denominator, it seems to me, is whatever will produce fetal distress, whether it be in utero, during the pregnancy or during the process of labor, during birth itself, or anything immediately following. Pulmonary hyaline membrane disease is more common in premature than in full term infants. There is a disproportionately high incidence among infants of diabetic mothers and infants delivered by cesarean section. On the other hand, it is rarely seen in babies under 1,000 gm. or in babies that are either stillborn or who die within an hour after birth.

Whatever produces fetal distress supplies the prerequisite for any complication in the newborn including that of hyaline membrane disease. Any anesthetic, for example, that will produce hypotension or prolonged respiratory depression in the mother will produce anoxia in the infant. Hypoxia of the newborn is best minimized by adequate prophylaxis, namely, the avoidance of unnecessary depression caused by amnesic, analgesic and anesthetic agents.

We live in a peculiar time in our civilization. Despite the high degree of enlightenment and education, women are still unduly influenced by old wives' tales of the horror and pain of labor and delivery. Consequently, many women in labor are excessively fearful and lack an understanding of the psychological aspects of labor and delivery. We as physicians also contribute unwittingly to the dilemma pregnant women find themselves in, by a lack of awareness of the semantics of the situation. Who stops to ask "How often are your contractions?" Most of us say, "How often are your pains?" We suggest pain to our patients. Consequently the doses of analgesics and hypnotics that the average woman requires, especially if the baby is premature, are far and above what the mother really needs and what the infant can tolerate. All these factors again produce respiratory depression in the infant which can keep him in a period of apnea longer than would ordinarily be tolerated. I am certain that in many instances it may induce respiration in utero itself. Who knows but that respiration in utero, with amniotic fluid lodging in the lungs of the newborn infant, is responsible in some cases for hyaline membrane disease?

What can be done as far as resuscitation is concerned? Too vigorous resuscitation can be very damaging. For example, positive pressure used injudiciously can tear a lung. Not only the pressures of oxygen blown into the lung, but the time interval between the various inflationary cycles, are important. We are caught between the maximum of 40 per cent oxygen which cannot be exceeded in prematures lest retrolental fibroplasia develop, and what statistics show is the necessary percentage of oxygen to prevent and treat hyaline membrane disease—namely, 50 to 60 per cent. It may be that we do not need much oxygen at all. It may be that we

Submitted September 28, 1959.

are overlooking something like compressed air mixed with oxygen or helium mixed with oxygen, to give us greater volume to inflate the lungs without the additional oxygen and its possible detrimental effects.

I would say that atelectasis when it is due to immaturity is something we can do very little about. But atelectasis which is due to secondary apnea or profound respiratory depression in the newborn infant, resulting from over-narcotization or over-anesthetization of the mother, must be corrected immediately. If an obstetrician or pediatrician is skillful in inserting a tracheal catheter without a laryngoscope, this should be done. However, if it is going to be difficult, time should not be wasted in the establishment of an airway and the larynx should not be traumatized. The baby should be turned over to someone who can insert a catheter very quickly under direct laryngoscopic visualization. It must never be forgotten that there may be fluid in the tracheobronchial tree which, before the first inflation of the lung, must be aspirated so that whatever fluid there is, be it amniotic or gastric, is not blown into the lung. If necessary, the catheter may be withdrawn and then reinserted. I might call to your attention that in animal experiments, when hydrochloric acid was poured into the lungs of the animals, in many instances a condition similar to that of hyaline membrane disease was produced.

The alveolar ducts and alveoli of newborn infants may change from normal to abnormal in a very short time. It is possible that the process might be interrupted by energetic therapy. The only chances for reversal are either during or just after birth. Irreversible changes may be prevented by proper lung expansion and proper oxygenation. If a positive pressure device is to be used, although initial pressures up to 30 cm. (water) may be required for initial expansion, pressures should not exceed 15 to 20 cm. for more prolonged resuscitation. The most efficient pressure is that which produces adequate pulmonary ventilation. The prophylactic use of detergent mists has been recommended but the results leave much to be desired. Recently, the question of temperature control as a means of therapy has come under study. Cook recommended that hypothermia be used, but Silverman's study showed a higher survival rate in the group of infants that were kept warm.[1]

In conclusion, it may be stated that because of the immaturity of all the functions in the premature infant, particularly the respiratory center, the heat-regulating center and the fragility of the capillaries, there is a greater need for the more intelligent use of sedative, narcotic, analgesic and anesthetic drugs in the mother, and for gentler handling and more prompt recognition of distress in the newborn infant. Most authorities agree that the most hazardous period of life is the first 15 minutes. Hypoxia is the greatest danger. If we avoid maternal respiratory and circulatory depression throughout labor, the condition of the infant at birth will be unrelated to anesthesia and analgesia. There are innumerable methods of pain relief and no method or drug is any safer or better than the individual who uses it.

Hyaline membrane disease and atelectasis of the lung present the greatest challenge in prevention and in the immediate institution of therapeutic measures. While we have learned a great deal about this mystifying condition and a great deal of progress has been made, we still have much more to do and much more to learn before a cure can be hoped for. This challenge and these problems will be solved only through the cooperative efforts of research, the obstetrician, the pediatrician and the anesthesiologist.

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Internist's Point of View

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DR. KAGAN touched upon my study of fetuses and neonatal infants in which it was noted that eight infants dying of hyaline membrane disease had a defect in the fibrinolytic enzyme system of their lungs. This was manifest by an inability of lung tissue to activate plasminogen. Most human tissues normally contain a tissue-activator of plasminogen. Lung is unique in that this enzyme appears earlier during fetal development than in any other organ, and it is present most consistently and in the highest titres. The tissue-activator has been shown to reside within the mitochondrial and microsomal fractions of the cell, and to be relatively insoluble.

I postulated that this enzyme functions in the lysis of intra-alveolar fibrin deposits. The fibrin appears to result from an interaction of the natural clotting factors present in an effusion from pulmonary capillaries with the thromboplastin in amniotic fluid or that resulting from damage to lung tissue (lung contains a very high level of thromboplastin). The mechanism involved may resemble amniotic fluid embolism in that diffuse deposits of fibrin are formed within the small vascular channels as a result of the amniotic fluid embolus. The deposits of fibrin in turn are thought to stimulate activation of

Submitted September 28, 1959.

the fibrinolytic enzymes, so that fibrin usually cannot be demonstrated at autopsy.

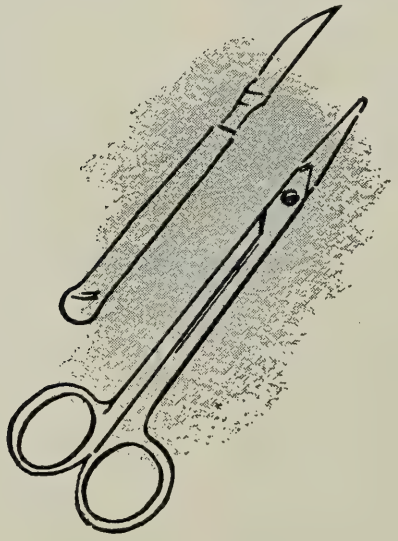
This same lytic phenomenon may be postulated to occur in lung when diffuse fibrin deposition occurs. The presence of fibrin would act in some way, presumably by means of the tissue-activator of plasminogen, to promote activation of the fibrinolytic enzymes. The fibrin deposits would thus be quickly dissolved, and most infants would not be in any serious trouble. It is thought that those infants lacking effective plasminogen-activator activity would not be able to dissolve intra-alveolar fibrin, thereby predisposing to hyaline membrane formation.

Inducing lysis of the hyaline membrane once it has formed is difficult. We are having some success, however, in preventing the formation of the membrane in guinea pigs by means of "plasmin" aerosol therapy. The membrane is produced in guinea pigs by first exposing them to a continuous 90 per cent oxygen atmosphere for 96 hours. At 24 hours nebulized solutions of amniotic fluid or of thromboplastin are introduced into the atmosphere the animals breathe. Very dense hyaline membranes can be found at autopsy. The thromboplastin solution appears to very definitely enhance the formation of the membrane, and probably does so in the newborn infants, too. If an aerosol of plasmin is given simultaneously with the start of oxygen exposure and periodically thereafter, four times a day, the formation of the membrane can be prevented in most instances. Many of the animals go on to die nevertheless of severe pneumonia. This work is still under way and results are as yet inconclusive.

Dr. Kagan mentioned that poison gases, x-ray, collagen disease and Hamman-Rich syndrome are also associated with hyaline-like membranes. X-ray and poison gas might act to denature the pulmonary fibrinolytic enzyme system, and thus predispose to membrane formation. We have also found that an abnormal inhibitor to the plasminogen activator exists in the lungs of patients with lupus erythematosus and rheumatic fever. This observation has not as yet been reported in the literature. So it seems that all these conditions may eventually be linked together by means of a derangement of pulmonary fibrinolytic enzymes.

At this point you might ask, "What happens to the child who is born with this enzyme defect but does not develop hyaline membrane?" After all, I mentioned that the defect only predisposes to the disease, and does not in itself cause the formation of hyaline membranes. I feel that many so-called idiopathic pulmonary diseases such as intrinsic pulmonary emphysema and Hamman-Rich syndrome may be examples of disease states resulting when certain "stress" factors are superimposed upon adults with abnormal lung fibrinolytic activity.

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Rupture of Dissecting Aneurysm of the Aorta

The Relationship of Effort to Onset

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• **Physicians are constantly being asked to testify in cases in which a complication of a degenerative disease occurred during the course of employment. In one of two such cases reported herein, compensation was granted, in the other, not.**

A physician can say for certain that the effort did not cause the disease, but he cannot say for certain that it had nothing to do with the rupture.

OBSERVATIONS made in dealing with two patients with dissecting aneurysms of the aorta, and the legal actions that followed treatment, stimulated this note on the relationship of effort to the onset of symptoms due to a dissecting aneurysm of the aorta.

CASE 1. A 56-year-old metal worker was admitted to hospital December 12, 1958, with complaint of paralysis of the legs of 24 hours' duration. The patient had been in hospital four years previously for pain in the back, which had been ascribed to herniation of an intervertebral disc, but no surgical therapy had been advised. Aside from intermittent pain in the back, he had been relatively well until the onset of the present illness. He had not been known to be hypertensive.

The morning of December 10, while at work, the patient was on his back wielding a 50-pound wrench when he noted the simultaneous onset of severe back pain and weakness of the legs. He managed to get up and walked about fifty feet before he fell, and could no longer move his legs. He was taken to a hospital, where a myelogram was done which was said to have shown rupture of a disc. A laminectomy was done but the intervertebral discs in the indicated area appeared normal. The patient was then referred to Stanford Hospital with a diagnosis of dissecting aneurysm of the aorta.

On entry, the patient was reasonably comfortable. He was paralyzed from the level of the tenth dorsal vertebra. The blood pressure was 117/82 mm. of mercury. While the general condition of the patient remained good, he had put out no urine in 24 hours, and did not secrete any urine in spite of treatment by hypothermia, until the day of his death, December 17, 1958.

At necropsy a classical dissection was observed, starting in the ascending aorta and rerupturing into the aorta just above the bifurcation.

CASE 2. A man 59 years of age who had been known to have had severe hypertension for over a year, was seized with a severe pain in the low back that then spread down both legs, while working under a bus in the course of his employment. The left leg was temporarily paralyzed at the onset of symptoms but its function returned in spite of persistence of pain. Upon examination in hospital, abdominal rigidity, leukocytosis and fever were noted and various diagnoses were considered. By the fourth day dissecting aneurysm of the aorta appeared likely and the patient was referred to the surgical service.

On physical examination the patient appeared sick and in severe pain. There was no pulse in the left femoral artery. Blood pressure was 300/160 mm. of mercury. X-ray films showed the aorta grossly widened. At laparotomy the aorta was observed to be thickened and covered with fibrin down to the bifurcation. A DeBakey reanastomosis was performed. As the dissection down the left common iliac was found to have thrombosed, no satisfactory back bleeding could ever be demonstrated. Two further attempts to reestablish circulation failed and the extremity had to be amputated. After a stormy course, including a bout of jaundice, the patient recovered enough to leave the hospital, still with hypertension.

DISCUSSION

In both cases the question of compensation payment was considered. Compensation was denied in Case 1 but granted in Case 2. The medical witness was expected to answer the question: Did the effort in which the patients were engaged at the time of onset of symptoms contribute to the final rupture which occurred at that moment?

Rupture of aneurysms due to injury has been known since medieval times. Vesalius[10] in his anatomical studies described a ruptured aneurysm in a man who had fallen from a horse. The term *aneurysme desquant* appears to have been first used by Laennec. In 1763, Nicholls[13] attributed the sudden

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death of King George II to dissecting aneurysm while straining at stool. A great many cases of dissecting aneurysm have been reported in the medical literature since that time, usually singly or in small groups. In many reports no mention is made of the patient's activity at the onset of symptoms. Nevertheless, the opinion is generally stated that the onset of symptoms is related to strain. Shennan,[16] who made a special report on dissecting aneurysms in 1934, came to that conclusion.

At no time did anyone consider that effort had any relation to the cause of the disease. Pathologists[6] generally agreed that the disease was of two types, one with arteriosclerosis, one without. The basic type consisted of an idiopathic medial necrosis, usually in the ascending aorta, followed by a rupture of the vasa vasorum, then a transverse intimal tear, hematoma of the aortic wall with further dissection, and at last rupture either back into the lumen of the vessel or externally into another body cavity. In young patients these pathological changes were noted alone, whereas, in older persons extensive arteriosclerotic changes were noted in association with the medial necrosis. These changes with the clinical picture of dissecting aneurysm have been described in children,[3] in Marfan's syndrome[4] and in pregnancy, with and without hypertension.

As the question of workman's compensation began to enter the picture, and further consideration was given to the activity of the individual at the time of onset of symptoms, in spite of earlier expressed opinions, it became obvious that the onset of symptoms frequently occurred during resting conditions, sometimes during sleep. Cherry and Cherry[2] reported on this particular point in 1941. They studied the records of 77 patients and found that moderate or heavy exertion was being performed at the onset of symptoms in only 12 cases, while 14 patients were in bed and nine were dining when the symptoms started. They also pointed out that dissection was not necessarily a hazard of heavy physical work. They came to the same conclusion reached 15 years later by Hurley and Birrell,[8] who, after a study of the records of 106 patients, said that "there is no evidence to support sudden exertion mental or physical as a common precipitating cause of dissection and no suggestion that the proportion of cases in which details of onset are available are not representative of the whole series."

In spite of the swing of the clinical opinion away from effort as a contributing factor in the onset of dissection, there is some theoretical evidence that suggests that a sudden increase in intravascular tension will damage microscopic points in the intimal wall. Byrom and Dodson[1] and Rather and Cohn[14] were able to produce acute lesions in the walls of major vessels by sudden increases in pressure. It is reasonable to assume that in a patient with idiopathic medial necrosis, the sudden rise of intra-arterial pressure that occurs in a person straining against a closed glottis might very well precipitate an impending rupture.

The physiological changes associated with the Valsalva maneuver have been described by Wood[17] as follows: The effect is more conveniently achieved by blowing up a column of mercury and maintaining the pressure at 50 mm. or as near that level as possible. This is, then, the intraoral pressure and may be assumed to be the intrabronchial and intrapleural pressure. The obstruction at the thoracic inlet tends to prevent cardiac filling and the heart shrinks. At the same time the venous pressure rises sharply until it exceeds intrathoracic pressure. Direct arterial tracings show a sharp initial rise in pressure equivalent to the rise in intrathoracic pressure during the phase of forced expiration. Thereafter, the blood pressure falls gradually, the pulse pressure diminishes and the heart rate quickens due to a fall in stroke output; on release of the strain, there is a sudden further drop in blood pressure equivalent to the fall in intrathoracic pressure, and for a few beats the pulse pressure may become very small due to the sucking of most of the available blood into the nearly empty venous reservoir. With restoration of normal conditions, the heart fills properly again and the cardiac output increases, but before the circulation returns to normal, the blood pressure rises well above the original level, the pulse pressure rises and the heart rate slows due chiefly to reflex vasoconstriction intiated by the small pulse pressure stimulating aortic and carotid baroreceptors during the period of strain. The net pulmonary artery pressure behaves like the systemic pressure, but the overshoot is less conspicuous. If the effort is continued there is a steady rise in systolic pressure (averaging about 40 mm. of mercury in a study made by Eldridge[5]).

Therefore, despite the assertion by the authors of clinical studies that effort is purely coincidental to the onset of rupture, it is not possible to state with certainty that a sudden rise in pressure is not the final push that breaks the vessel wall. If this accident occurs while the patient is engaged in his employment, the question then arises: Is it an industrial accident? An honest physician simply cannot deny the possibility that any sort of effort, mental or physical, in the course of living will precipitate the final outcome in any number of degenerative diseases.

Lane[9] wrote a very enlightening monograph on the California Workmen's Compensation law which bears on this point. He concluded that the problem

of degenerative diseases primarily caused by the aging process which all persons undergo should be considered in the same category as unemployment or retirement. He did not believe that some slight work connection warrants the treatment of degenerative disease in the same manner as those injury or disease situations which are primarily caused by the industrial environment.

It is quite obvious that, in the case of dissecting aneurysms of the aorta that occur while the patient is at work, a physician cannot answer the question of relationship of effort to onset as the patient's lawyer might wish. On the other hand, he cannot deny it as a possibility. The solution to the problem lies in a redefinition of the problem by the legislature (Labor Code Sec. 3212, 3212.5).

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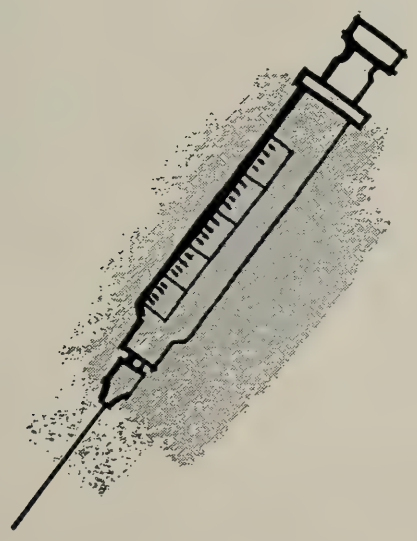
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Radiation Facts for Public Health Officers

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• **In the medical use of x-rays a few kinds of examinations contribute a large percentage of the gonadal exposure. Dose reduction to a population need not require total reduction nor restriction of the medical use, but study and attention to a few examinations in the pelvic region may satisfy the most skeptical that the use is justified or indicate the need for modification of our present indications for taking x-rays in this area.**

The potential dangers of ionizing radiation have long been respected and responsible organizations are constantly studying new developments that might add to the dangers and new knowledge that might affect conclusions.

IT IS NOW generally accepted that there is a need for continuous evaluation of the exposure of the population to ionizing radiation. Both voluntary and mandatory regulation and control of the quantity of ionizing radiation produced by man, and of the amount to which man is exposed, seems probable. This development will involve public health officers to a greater degree than might have been imagined before the use of nuclear energy began.

The broadest question of concern to public health officers is whether exposure that is now considered the maximum permissible produces harm of a biological nature and, if so, what is the magnitude of this harm. At present there is no positive quantitative answer to this question. There are, however, opinions in the literature that *any* radiation is harmful, that even the low levels within the range of maximum permissible exposure are significantly harmful, that present levels of exposure should be greatly reduced and that further steps should be taken to keep the range of controllable ionizing radiation as near zero as possible.

There is another view, expressed in the literature, that the range of ionizing radiation exposure to which man is at present exposed will not cause significant biological harm, and that the present course may be continued with the maximum permissible exposures being reconsidered from time to time for whatever adjustments seem advisable.

Data now available may help in an appraisal of the problem as it stands at present.

Chart 1 is a graphic presentation of measurements, made in various places at various times, of the cosmic radiation and the local gamma rays emitted by naturally radioactive materials in our environment. While the amounts registered here are not large, the concept that the range of the natural background is wide is important in the argument that the present range of ionizing radiation is acceptable. The wide variations of exposure at various elevations suggest that man apparently can live satisfactorily within a considerable range of ionizing radiation without any detectable biological effect, and this includes genetic and somatic effects. Therefore, it is probable that a small increase within this broad range would scarcely affect the biological balance even if large population segments were exposed. It is also probable that in the relatively small segments of the population that are occupationally exposed to radiation well within this range there should be no detectable biological effects.

Man-made fallout contamination, as represented by the straight line at the bottom of the chart, has been very small in relation to the normal background radiation. However, the straight line is misleading in that the background contributed by fallout is actually irregular and thus, variable, as is the natural background because the fallout is dependent upon weather conditions and the altitude at which measurement is made. It is only the probable average increase that is meant to be represented by the line. Not shown on the chart, but to be taken into account, is the medical use of ionizing radiation, which, the National Academy of Science has estimated, has added 100 milliroentgens a year to the average per capita exposure of persons under 30 years of age in the United States. Thus, when the increase from the medical use of radiation is superimposed on natural background, it is of such magnitude that the natural variations make it unlikely that any experiment of the direct observation type will differentiate the biological effect of either one.

If this is the case, then on what factual basis can it be determined that even this range of exposure could be biologically significantly harmful? One of the most sensitive indicators has been the genetic effect of ionizing radiation. It is well established that with high levels of exposure to biological preparations there is a genetic effect and if these effects are plotted as the dosage is reduced, the line extends and appears to pass through zero or very close to zero as in Chart 2. The number of points

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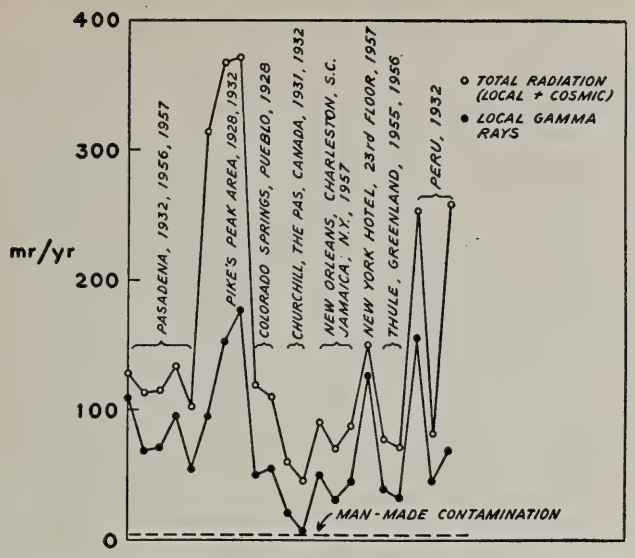


Chart 1.—The range of background radiation. (Reprinted from Neher, H. V.: Gamma rays from local radioactive sources, Science, 125:1088, May 31, 1957.) Reproduced by courtesy of the editor.

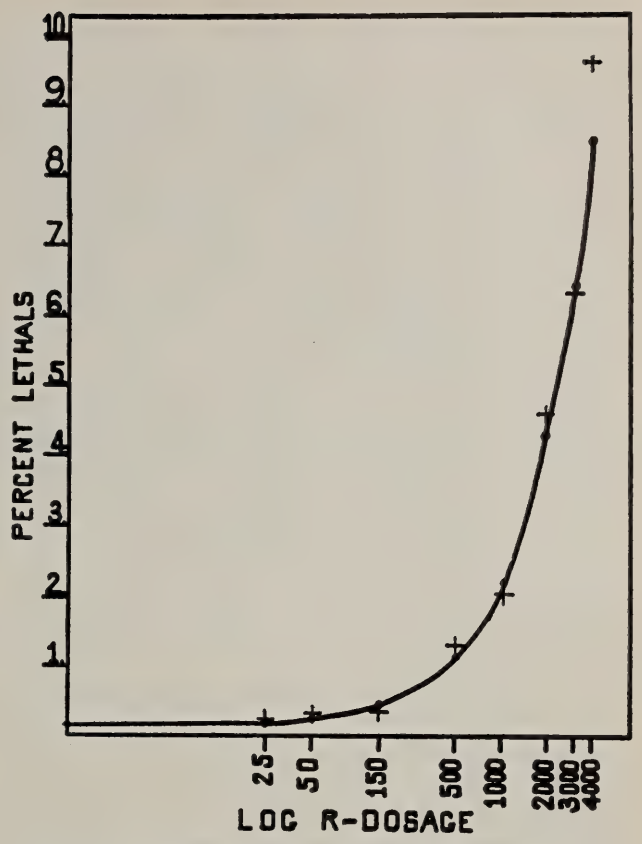


Chart 2.—Mutation rate vs. dose in Drosophila. (Reprinted from Spencer, W. P., and Stern, C.: Experiments to test validity of linear R-dosage mutation frequency relation in Drosophila at low dosage, Genetics, 33:43, 1948.) Reproduced by courtesy of the editor.

which have been determined along this line are grouped together at rather high dosages. When one begins to examine the material in the lower dose range to see whether or not any points far down the curve can be established, difficulties of interpretation are encountered. Table 1 is a particular group in an experiment of this type. It attempts to show that low levels of ionizing radiation increase the mutation rate and Table 1 summarizes five of these experiments. In the first experiment on Drosophila it was found that the mutation rate following 50 roentgens showed a difference of .14 percentage points as compared with the controls. When this experiment was repeated using sperm that had been aged for 21 days, it was found that the difference in mutation rate was only .03 percentage points, and this was not statistically significant. Since this raised the point of why these observations were in conflict, the other groups of experiments were performed. Fifty roentgens were given again to aged sperm and this time there was a difference of .11 percentage points, which was significant. Then the dosage was doubled and the effect was approximately doubled. The 50 roentgen exposure was repeated in a similar manner, and again it resulted in a difference of .07 percentage points. Now, if these differences are examined individually, it is found that the majority of them support the idea that the mutation rate is proportional to the x-ray dose. It is to be noted, however, that in the control spontaneous mutation rate in the total group of experiments, there is a wide range of variability which is purely fortuitous. The actual change following radiation is quite consistent; it is only the spontaneous mutation rate that is uneven. As a matter of fact, one might say that the ionizing radiation had a stabilizing effect on the mutation rate as it is observed here. This, as a group picture, is not completely acceptable evidence that a critical point has been established in the curve at 50 roentgens. It would appear difficult at this level

TABLE 1.—*Mutation Rate in Drosophila at Low Dosage

Treatment	No. of Controls	No. of Experimentals	Mutation Rate Per Cent		Differences
			Controls	Experimentals	
50 r, 2.3-5 minutes exposure, not aged (Spencer and Stern)	73,901	31,560	0.0974	0.2440	0.1466
52.5 r, 21 days exposure, aged (Caspari and Stern)	56,252	51,963	0.2489	0.2848	0.0359
50 r, 24 hours exposure after 20 days aging	44,601	46,232	0.1682	0.2834	0.1152
100 r, 21 days exposure, aged	22,958	31,562	0.2352	0.4658	0.2306
52.5 r, 21 days exposure, aged	36,184	29,424	0.1765	0.2542	0.0777

*Reprinted from Uphoff, D. E., and Stern, C.: Genetic effects of low intensity irradiation, Science, 109:609-610, June 17, 1949. Reproduced by courtesy of the editor.

to stabilize the spontaneous mutation rate to such a degree that the effect of the x-rays could be observed. When the amount of radiation is further reduced, the effects get smaller and the experiments have to be made larger in order to get a statistically significant result until finally, at levels much lower than these, one is faced with experiments of overwhelming size. It is this fundamental fact, complicating the observations on the effect of small amounts of ionizing radiation, that has made direct human studies impractical.

There is another point in this argument. If one accepts the idea that any amount of ionizing radiation applied to the population produces its random quota of genetic effect, the rate of exposure makes no difference. When "X" roentgens to the recipient have accumulated, the total will have the same genetic effect, provided it is received in the reproductive lifetime, as if it had been given all at once. Therefore, geneticists add together all of the radiation exposure received by man over his first 30 years of life. This is accepted as the average age at which reproduction is completed and is used as the total amount of radiation received, correlating it as much as possible with the results of experiments (in most of which the radiation was delivered within a short period of time) and which are subject to the difficulties of interpretation just discussed.

It should be emphasized that the acceptability of this segment of the argument rests strongly upon the premise of a no-threshold effect. Further, in this no-threshold effect is the supposition that the ionizing events which cause the genetic mutation are random events on an all-or-none basis, and that they are irreparable and irreversible. This, in effect, is the so-called target theory of the biological effect of ionizing radiation. The investigators who are studying this experimental data continue to seek in man a detectable effect at low dosages, such as life shortening or incidence of disease, which would support the supposition and theory of no-threshold and establish definitely the importance of single ionizing events in producing disease or harmful effects on man.

On the average, the total amount of ionizing radiation received up to age 30 from all sources is lower than any dose for which there is direct experimental evidence that significant damage has been done, genetic or otherwise. There is one type of material in the literature which is an exception to the above statement, and that is the purely mathematical manipulation of results similar to the experiments just described and extrapolating results to theoretical low levels. These manipulations are still tenuous in their arguments and more acceptable evidence is needed to establish their validity. If more convincing evidence is produced in the future, it may very well be necessary to revise the working rules now accepted as reasonable.

TABLE 2.—*Roentgenographic Examinations by Conditions

	Per Cent
Chest	33.01
Stomach, duodenum, esophagus	12.22
Abdomen	6.47
Spine	6.34
Colon	5.66
Skull orbits, sella turcica	4.42
Pelvis and hip joints	4.16
Thigh, leg, knee	3.17
Urographic excretion	2.82
Urinary tract	2.60
Heart	2.08
Gallbladder	1.98
Ankle and foot	1.85
Sinuses, paranasal and mastoids	1.80
Wrist and hand	1.58
Arm, forearm, elbow	1.38
Urographic, retrograde	1.32
Sacroiliac	1.27
Shoulder girdle	1.15
Facial bones	0.77
Cholangiogram	0.59
Ribs and sternum	0.58
Bronchogram	0.48
Ventriculogram	0.47
Small intestine	0.44
Encephalogram	0.38
Miscellaneous	1.00
Total number of examinations 30,355.	100.00

*Reprinted from Donaldson, S. W.: The practice of radiology in the United States: Facts and figures, Am. J. Roentgenol., 66:929-946, 1951. Reproduced by courtesy of the editor.

In the discussion of Chart 1 the average exposure to the population under age 30 was shown to be in the region of approximately 100 milliroentgens per year from medical use of ionizing radiation, which in 30 years would be the 3,000 milliroentgens, or approximately the 3 to 4 roentgens estimated in the National Academy of Sciences' report. We might increase our understanding of the particular subject by examining in greater detail the medical use of ionizing radiation, especially that for diagnostic purposes. Data on the relative frequency of various examinations using diagnostic x-ray are shown in Table 2. As might be expected, the examinations that deliver the greatest amount of radiation to the gonads are those in which the gonads come in the direct beam of the x-ray. Hence, to understand the distribution of the radiation from medical use, one must study the type of examination done and the exposure received from the particular examination.

Table 3 shows the radiography done by radiologists and all physicians on the adult group, ages 12 to 30, in the categories shown. Columns 5 and 6 list the total number of man-roentgens delivered to the gonads of the population within this age group from these examinations. It should be noted that column 4 gives the percentage of examinations in the total group and that in some fields there are

TABLE 3.—*Probable Annual Genetically Effective Medical Diagnostic X-ray Dose to the Gonads of the Population in the United States

(1) Type and Number of Examinations	(2) Gonad Dose/Examination Milliroentgens Female	(3) Gonad Dose/Examination Milliroentgens Male	(4) Per Cent of Examinations in Group	(5) Total Number of Man-Roentgens per Year Female	(6) Total Number of Man-Roentgens per Year Male
A. General Radiography:					
Radiography (radiologists and all physicians):					
Adults (age 12-30):					
4.4 million exams—female					
4.9 million exams—male					
1. Genito-urinary tract:					
a. Pyelography	1,200	2,000	4.1	215,000	405,000
b. Urinary tract	1,000	300	2.6	113,000	38,000
c. Salpingography	1,000		0.3	130,000	
2. Gastrointestinal tract:					
a. Abdomen and colon	500	200	12	262,000	118,000
b. Stomach and upper GI	300	200	13	170,000	128,000
c. Gall bladder	200	10	3	26,000	150,000
3. Skeleton-pelvic region	1,000	2,000	10	440,000	980,000
4. Skeleton-extremities and chest	0.5	1.0	12	300	600
5. Chest	0.3	1.2	35	500	2,000
6. Head	0.2	0.6	8	70	200
Total radiography—adults				1,357,000	1,687,000
B. Obstetrical Examinations:					
A. Mothers:					
0.3 million effective pelvimetries	2,500		100	750,000	
2.5 million effective births for:					
1. Placentography (1 film per exam)	260		0.6	3,900	
2. Abdomen flat plate (1 film)	260		3.4	23,000	
3. Chest (1 film/exam)	0.1		47.4	100	
Total obstetrical—mothers				776,000	
B. Fetus:					
3.6 million births in hospitals (50 per cent male, 50 per cent female):					
1. Pelvimetry	4,000	4,000	11.4	546,000†	546,000
2. Abdomen flat plate (1 film)	400	400	3.4	16,500	16,500
3. Placentography (1 film)	400	400	0.6	2,900	2,900
4. Chest (1 film)	0.3	0.3	47.4	200	200
Total obstetrical—fetus				566,000	566,000
Total obstetrical dose				1,341,600	566,000
Total diagnostic gonad dose				5,200,000	5,800,000

†All fetus doses have been reallocated to correspond statistically with the other examinations. The multiplying factor is 0.67.

*Reprinted from Laughlin, J. S., and Pullman, I.: Preliminary report of gonadal dose received in medical use of x-rays. Prepared for the Genetics Panel of the National Academy of Sciences' Study of the Biological Effects of Atomic Radiation, November 19, 1956. Reproduced by courtesy of the author.

values ranging from 350,000 to over a million man-roentgens, depending upon the area examined. The total exposure, therefore, is more directly related to the area examined than to the number of examinations. For instance, of the nine million examinations listed under the adult category, chest x-rays accounted for 35 per cent of the total as seen in item 5. However, the total gonadal exposure in this age group was 2,500 man-roentgens. Comparing this with the three million man-roentgens (total from radiography) brings into sharp focus the relatively insignificant exposure from chest x-rays—an amount that might as well be disregarded. Therefore, if all chest x-ray examinations were to be discontinued it would have very little effect on the gonadal exposure of the population. This brings into good perspective the hysteria that has been prevalent in some pieces of literature on the dangers of certain diagnostic examinations. It further illustrates the shakiness of broad generalized indictments of misuse.

Part B of Table 3 shows the exposures attendant on obstetrical examinations. Here, attention is focused particularly upon pelvimetries and the examination of the pelvis of pregnant women. In considering these data it may be better to begin at the bottom with the line, "Total Diagnostic Gonadal Dose," which is 11 million man-roentgens. These total figures were taken from the over-all use of diagnostic x-ray, some of which have not been considered at this time. The line above that indicates the total obstetrical dose to be almost 2 million

man-roentgens, so that this would approximate 18 per cent of the total gonadal exposure, and it is received from obstetrical examinations that make up less than 1 per cent of the radiological examination. Discontinuance of obstetrical radiology would significantly reduce the population exposures but this effect would have to be balanced against the expected increase in morbidity and mortality in obstetrics if the films were omitted. Is it possible to restrict the indications for obstetrical radiology to those conditions of greater necessity than may at present be in use and thus reduce the overall total exposure? Laughlin and Pullman estimated that 23 per cent of primiparas had pelvimetry during pregnancy. This matter deserves further exploration to determine whether their assumptions and samplings are indeed correct when applied to the total population of the United States. However, accepting the figures at their face value, one questions whether 23 per cent of primiparas really need pelvimetry. Certainly 23 per cent of women do not have abnormal pelves or fetal disproportion. But it is likewise true that in order to diagnose correctly the number that have disproportion, it is necessary to examine a larger group, and it may very well be that 23 per cent is a figure that cannot be lowered much without affecting the morbidity and mortality. The medical reward may far outweigh the gonadal exposure hazard.

These possibilities are mentioned in order to show the need for a program of constant appraisal and investigation, and to point out directly that there is need for, and time for, further study of the subject.

X-ray exposures from medical use can be modified at any time. They do not have the irreversible status as long-lived isotopes from fallout contamination, and they will remain under constant appraisal as they have been for the past 50 years. One reference to the fact that the medical profession has been aware of danger in its use of x-ray is to be found in a textbook on x-ray diagnosis published in 1912 by Bythell and Barclay. The closing paragraph includes the statement that stress must be laid once more upon the importance of avoiding all unnecessary exposure to x-rays. And it is further stated, "It is advisable to have some idea of the exposure we may give the patient during the course of an x-ray examination without causing him to suffer any ill effects." In a text by McKee on x-rays and radium treatment published in 1921, a section on the biological explanation of the effect of x-rays contains a paragraph devoted to the known histogenetic phenomena even though it was admitted that the morphological picture failed to explain the fundamental changes. The author referred to the work of Hertwig who had demonstrated that the visible damaged cell structures were the chromosomes. They deduced that the chromatin was directly injured by radiation, that it was the primary injury and all subsequent developments were consequent to it.

These extracts are from books that are used by the medical profession, which indicates that published information has not been disregarded, nor are practitioners unaware of the potential danger. Further, for 25 years or more there have been committees, supported by the medical profession, that evaluate the literature of the world on this subject. They have reappraised the use of ionizing radiation and adjusted recommendations as to the maximum permissible exposure. These are continuing bodies with international representation, constantly at work, that can be called into session at any time to study new material and to publish recommendations for change. It is really some of the other disciplines of science that are newcomers to the awareness of danger, and while they are welcome allies in the study they are by no means the originators of the concept. In the field of the medical use of ionizing radiation we can surmise that the dosage will continue to decrease as the efficiency of mechanical generators is improved, new equipment becomes available, better techniques are developed and perhaps even more rigidly selected indications for x-ray examinations are recommended, if that be needed. Fallout contamination is a global problem that has political implications and is beyond the ability of the previously mentioned organizations to modify. It is, therefore, beyond the limits of present discussion.

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Brain Damage in the Infant—Genetic Aspects

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• **With better control of environmental agents in malformation and brain damage in infants, increasing attention is being given to genetic factors as causes of brain damage. An example of such a hereditary condition is Tay-Sachs disease, which leads to degeneration of nerve cells in the brain, resulting in mental deterioration, blindness and early death. Genetic factors are readily traceable in this condition. But in many other cases of brain damage, it is more difficult to decide whether a hereditary cause exists, whether an unfavorable environment was responsible, or whether factors in the heredity and environment acted together.**

The recognition of the importance of genetic factors in brain damage to the infant as well as in other congenital malformations is a first step in the direction of prevention. Our position at this time may be compared to that of medical science when Pasteur and Koch demonstrated the importance of microorganisms in the pathogenesis of infectious diseases; it took decades for those diseases to be truly effectively combated and it may take a long time to learn how to keep a potentially dangerous genotype in the embryo from becoming manifest.

THE MORE SUCCESSFUL that modern medical methods are in diminishing or eliminating environmental agents as causes of disease, the more is the recognition given to the importance of genetic factors. When it was found that rickets is due to vitamin D deficiency, it seemed to be removed from the defects that have a genetic basis. But when vitamin D prophylaxis and therapy were applied on a large scale, some cases of rickets proved highly resistant;[1] and it was then discovered that specific genes exist which are responsible for the disease in persons supplied with normally adequate doses of the vitamin.[12] A similar situation exists with regard to brain damage in infants. The more we can eliminate the effect of nongenetic agents, acting prenatally or at birth, the greater will be the relative weight of genetic factors.

In many cases it is not possible to tell with certainty whether brain damage is caused by genetic or by nongenetic interference with normal development. Heredity and environment are not mutually exclusive entities but interact in the production of a normal or abnormal organism. Brain damage of some types may be produced in any individual if circumstances are unfavorable—say, severe mechanical harm or severe anoxia at birth. Other kinds will originate under the best constellation of prenatal or perinatal factors, for example the abnormal storage of lipoids in cells of the central nervous system characteristic of Tay-Sachs disease. Between these extremes lie many cases in which genetic predispositions are expressed under some sets of conditions and remain unexpressed in others.

How can one recognize the presence of genetic factors in brain damage? The clearest evidence is provided by simple recessive condition. Infantile amaurotic idiocy (Tay-Sachs disease) may serve as an example.[7] The parents of the affected infants are always normal. If one pools the data for children from different parents, one obtains the classical Mendelian ratio of three normal to one affected (granted the necessary corrections for the existence of some families which by chance did not contain a single affected child although the expectation for affected children was one in four.) This situation is explained by the presence in each parent of a dominant gene for normality and a recessive gene for the disease. Among the children, one quarter will receive an abnormal gene from each parent and, being homozygous, will be affected.

Two additional facts lend support to this theory of genetic causation of Tay-Sachs disease, namely, the absence of affected children in other sibships of the family group and the high incidence of consanguinity among the parents of affected children. Since the recessive gene is a rare one, most persons who carry it would marry spouses free from it and therefore have normal children only. Even though many normal relatives of the affected children would carry the recessive gene, their marriages are not likely to lead to Tay-Sachs offspring. The genetic interpretation thus is compatible with the fact, and even requires it, that a sibship with affected children usually stands alone among a multitude of normal relatives, in earlier and later generations, in the direct line of descent, and in collaterals.

Occasionally, of course, a normal carrier of the abnormal gene, perhaps a sib of one who is affected, will marry someone who is also a carrier. Then the trait will appear in successive generations. This will be particularly so if the spouses are closely related to each other by descent. Then they may carry the

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same abnormal gene derived from their common ancestor. Genetic causation of a defect, based on a rare recessive gene, should be reflected in relatively frequent consanguinity of the parents of affected children. Indeed, in data on Tay-Sachs disease, the consanguinity rates of the parents were from 20 to over 50 per cent, in contrast to the rates in most general populations which lie between 0.1 and 1 per cent.

Considering the smallness of modern families, a disease such as Tay-Sachs with its chance of presence in only one quarter of the children, will usually appear in a single child only. The so-called sporadic outcropping of an affected child, which seems to contradict a naive view of inheritance, is thus a necessary aspect of a theory of inheritance which focuses attention on inherited genes and not on individually expressed phenotypes.

What has been discussed for amaurotic idiocy is nearly equally valid for phenylketonuria.[8] Here, a homozygous recessive gene causes abnormal metabolism of phenylalanine which leads to brain damage with resulting mental deficiency. But there is some variability in amount of excretion of phenylpyruvic acid and an occasional affected individual may approach average mental capacities.

Geneticists use a descriptive phrase for such occurrences. They speak of "incomplete manifestation" of the genotype or of "incomplete penetrance." No more is implied with these words than that the effectiveness of the genes to produce a certain trait may not be absolute. The causes for the absence of a trait in spite of the presence of the genes which usually lead to its appearance may be manifold. A given gene pair does not work by itself. It is only one agent among thousands of other genes whose collaboration makes possible development and functioning. If the genes for phenylketonuria find themselves in the "genetic background" of individual *A*, they may produce a stronger effect than if they are in the different genetic background of individual *B*. And if the genetic background can influence the expression of a specific gene pair, then, equally, the environment, prenatal or postnatal, may have its part in the manifestation of the gene pair. Indeed, the recent beginnings of feeding phenylketonuric infants with diets low in phenylalanine are an attempt to suppress the penetrance of the abnormal genotype by therapeutic environmental means.

The few atypical phenylketonuric persons do not seriously disturb the picture of clear genetic determination of the defect. As in Tay-Sachs disease, the parents are normal, the corrected ratio of normal to affected children is 3:1, the affected sibship usually stands alone in the family group, and consanguinity of the parents is frequent. And an additional fact proves the genetic causation. Tolerance tests for phenylalanine given to the parents, or to the normal sibs of the patients demonstrate a mean difference between the normal but heterozygous carriers of a single gene for phenylketonuria and the majority of normal individuals who are not carriers.[5]

The problems of recognizing genetic determination of defects are more complex when incomplete penetrance often results in individuals who carry a certain genotype but do not manifest the trait associated with it. Most frequent among the infantile defects of the central nervous system are anencephaly, hydrocephaly and spina bifida. Jointly, they are responsible for more than five deaths and stillbirths per 1,000 newborn. To some degree they seem to belong together: The association in one infant of anencephaly with spina bifida is more than 30 times as frequent as would be expected by chance and hydrocephaly with spina bifida more than 150 times.[9] Are these defects to the brain or other parts of the central nervous system caused by some simple genetic situation in the embryo which may express itself in variable ways? Or are they the result of damage from extra-embryonic sources, either provided by the mother or mediated by her? Or, finally, are they developmental derailments due to nongenetic, chance mishaps within the embryo?

Some light on these questions is shed by the finding that in a large British sample the frequency of the malformations among the sibs of affected infants was more than six times higher than in a control population. This rules out an interpretation of these malformations as the result of accidental developmental disorders. But it is compatible either with the interpretation that the prenatal environment provided by a specific woman may be repeatedly unfavorable, or that genetic factors common to many sibs are responsible. To decide between these alternatives, students have considered a variety of external variables which conceivably might be concerned with the origin of early brain damage as represented by anencephaly and related defects. No correlations of frequency of defects were apparent with diseases of the mother, with various socioeconomic indices, nor probably with maternal age. In the British sample, there was a higher risk at the first pregnancy than at the following ones, except for a rise after the sixth. Since the genetic constitution of sibs is independent of parity, the parity effect shows that some nongenetic factors pay a role in the causation of these defects of the central nervous system but they do not seem sufficient to account for the relatively high "repeat frequencies" of defectives in sibships in which an affected child has appeared.

Suggestions of genetic determination come from the fact that there is a slightly increased frequency over control groups of defects among the more distant relatives of parents of defective children. And finally, there is the greatly increased rate of early abortion in sibships in which infants had been affected by one or more of the three defects. This high rate of abortion has been interpreted as being caused by the loss of particularly severely affected embryos.

From a Swedish study it was concluded that anencephaly is due to a single recessive gene (perhaps a different one in different families) whose expression varies from usually causing early abortion to, more rarely, anencephalic development until term.[3] One might add that the presence of the postulated genotype may sometimes be compatible with perfectly normal development. Such a hypothesis is intrinsically fully acceptable. Presumably, anencephaly is initiated at a very early embryonic stage, namely, at the time when lateral folds of the medullary plate rise and meet each other, thus enclosing the brain. Given some variability in these processes they may fail to occur all along the length of the neural plate and result in early abortion; may lead to partial closure with anencephaly with or without spina bifida; may permit the normal development of the brain but cause more or less extensive spina bifida; or may permit complete closure all along the system and the birth of a nondefective infant. Of course, the acceptability of such an interpretation does not mean that it is correct, and a recent study in a Japanese sample has failed to reveal high abortion rates in mothers of anencephalics.[10]

Even if a genetic interpretation is valid in many instances, it must be kept in mind that one and the same defect may owe its appearance to abnormal genes in one case and to abnormal environmental circumstances in another. It has been established by numerous animal experiments that well-known genetic defects can be produced artificially as "phenocopies."[11] This is not surprising, since the chain of normal developmental events may be interrupted or diverted as readily by abnormal gene substitutions which can block or modify biochemical reactions as by abnormal external agents which can block or modify the same reactions. Moreover, the same abnormal end result can be produced by a gene affecting step *X* in the chain of events or by a nongenetic agent affecting an earlier or later step *Y* in the same chain.

These facts should keep us from being dogmatic in too readily assigning either genetic or nongenetic factors to the origin of a brain damage of a given type. And even apart from interaction between gene and environment, the same kind of effect can often be produced by different genes, in different ways, or by different external agents, in different ways. In the fruitfly *Drosophila*, many tens of different genes are known which disturb the normal development of the brain or of the peripheral nervous system. Some are dominant, others recessive; some are fully penetrant, others incompletely so; some are in the *X* chromosome, others in one or the other autosome. Developmentally the effects of these genes may appear alike or different, and biochemically each one seems specifically different. In other examples, an organ may be defective because it never developed completely after a certain stage, or it may be defective because, having developed well, it then begins to degenerate.

What is true of different genic causes is equally true of extraneous ones. Brain defects may be induced by chemical agents acting during the earliest initial stages of organogenesis, as was proven many years ago on the eggs of fishes and frogs. An example of reversal of early normality was recently demonstrated in the chicken. If hens are fed with selenium, the brain, spinal cord, eyes and limb buds of the embryos in their eggs first develop normally. Later, however, necrosis sets in within certain areas of these organs and causes defects in them as well as, secondarily, in nearby areas.[4] These and other observations have shown the early optimism to be premature that the artificial production of phenocopies would lead to the discovery of "the" point of attack on abnormal development by a gene with a similar final effect.

At the time the present discussion was presented before the California Medical Association, one of the supposedly most striking examples of an interaction of genetic and nongenetic agents in causing abnormal development of the brain was mongolism. The very great rise in the risk of mongolian births from women in the later period of their reproductive life seemed evidence for environmental, intra-uterine interference with normal brain differentiation. It was clear, however, that genetic factors play an important part in the etiology of mongolism since a mongolian nonidentical twin is nearly always associated with a normal twin sib while a mongolian identical twin probably always has a mongolian cotwin. This would be expected if a specific genetic constitution is a prerequisite for mongolism, since two identical twins carry the same genes and two non-identical twins different genes.

Recent discoveries, in France, England, Sweden and elsewhere, have furnished dramatic proof of the genetic determination of mongolism and, at the same time, seem to have removed intra-uterine variability as a cooperating agent in the causation of this condition. Mongols have been shown to possess 47, instead of the typical 46 chromosomes in their cells: One of the smallest of the human chromo-

somes occurs three times instead of the normal two-fold representation. The age effect of the mother which leads to mongolism is not exerted on the developing embryo, but on the nucleus of the egg before it is ready for fusion with the sperm nucleus. Apparently the process of "nondisjunction" in oogenesis—long known in experimental organisms—occurs relatively frequently in older women and results in the retention of two chromosomes of a given pair in the egg nucleus instead of normal segregation which retains only one. Mongolism is due to abnormal development caused by the abnormal "unbalanced" genetic-chromosomal constitution.

An interaction between specific genotypes and specific environments has been demonstrated experimentally between genotypes and excessively reduced atmospheric pressure in the production of skeletal malformations in the mouse.[6] In five different strains, for 0 to 29 per cent of the young from unexposed control mothers showed deviations from a standard type of sternum. Reduced atmospheric pressure, equivalent to an altitude of 29,000 feet, applied to pregnant females resulted in from over 20 to over 70 per cent deviations from the norm. The five strains differed in the spontaneous incidence of deviations as well as in the frequency of induced variants. Moreover, the strain with the highest frequency of induced variants had a lower frequency of spontaneous ones than some of the other strains.

The existence of genetic factors in brain damage poses the problems of counseling to parents and relatives of affected children. If the genetic situation is simple, such counseling can be given in specific terms. If it is complex, or unclear, the best that can be done is in reference to empirical risk figures, obtained from large representative samples. Some such surveys contain significant information like those on anencephaly and related defects, as discussed herein. For other traits, only limited data are available. It can be expected that new detailed studies of populations will enable the counselor to increase the precision of his predictions.

The recognition of the importance of genetic factors in brain damage as well as in other congenital malformations is a first step in the direction of their prevention. Our position at this time may be compared to that of medical science when Pasteur and Koch demonstrated the importance of microorganisms in the pathogenesis of infectious diseases. It was decades before these diseases were truly effectively combated and it may take a long time for us to know how to keep a potentially dangerous genotype in the embryo from becoming manifest. The recognition of genetic causes of maldevelopment is not an endpoint but rather a preparation for future action.

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Carcinoma of the Uterine Cervix

Interstitial Radioactive Colloidal Gold Therapy of the Lateral Pelvic Nodes

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• **Since January 1955 radioactive colloidal gold has been used interstitially as an adjunct to radium therapy in the treatment of 48 patients with squamous cell cancer of the uterine cervix. In 40 cases the lesions were Stage I and in eight cases Stage II. Five in the series have died, all of them of advanced metastatic disease.**

Although our data are not extensive enough to warrant conclusions, from results to date we feel the method used is proving to be an effective weapon for control of most Stage I and II and some latent Stage III cancers of the cervix.

FROM A CRITICAL INSPECTION of salvage reports for cancer of the cervix over the past decade it appears that irradiation therapy is considered by most leading authorities to be the treatment of choice for all clinical stages.[7,8,13,17] It is also readily apparent that in clinical stages I and II well planned and properly delivered radiation will yield results equal to that obtained by the performance of radical operation in selected cases.[8,10] Table 1, a compilation of salvage reports from several sources over the past ten years, emphasizes that well managed radiation therapy can be expected to result in about a 75 per cent five-year salvage for unselected Stage I lesions and about a 45 per cent five-year salvage for clinical Stage II.

Table 2 contains very recently reported data from the Radiumhemmet and reveals a definite improvement in five-year salvage in Stage I lesions treated by irradiation in an individualized manner. The absence of improved results in the other three stages is quite apparent and may possibly be due to the spread of the tumor into the lateral pelvic nodes and beyond before initiation of treatment.

Although it is fairly well conceded by investigators at most treatment centers that the majority of Stage I and II lesions can be adequately treated by either good irradiation or good radical operation, a considerable difference of opinion exists as to the reason for treatment failures in either group.[13] The concept of radiation resistance of certain tumors is championed by the advocates of radical operation as the most probable reason for a poor result in the tumors treated by irradiation alone, while the radiotherapists are more likely to indict inadequate surgical excision of the tumor, faulty radium therapy technique, and over-irradiation as the reason for failure of treatment.[10] The common denominator, however, of all poor results in the first two clinical stages is the presence of tumor in the pelvic lymph nodes not clinically detectable at the time of the initial staging pelvic examination.[17] Table 3 shows the precipitous drop in five-year salvage rate that occurs in surgically treated cases of cancer of the cervix in which there is involvement of lymph nodes.

In an attempt to improve the five-year salvage, certain investigators used preoperative irradiation in cancericidal doses in accordance with standard techniques and did succeed in lowering the incidence of "positive" nodes (Table 4).[17] However, it has been repeatedly emphasized by Meigs[10] that a

TABLE 1.—*Reported Five-Year Salvage by Radiation Therapy for Carcinoma of the Cervix in the Last Ten Years. (From Sherman and Ruch.[17])*

Reported by	Source	Salvage Rate (Per Cent) Stage I	Stage II
Corscaden	Sloane Hospital	70.8	38.6
Waterman	Rhode Island	70.9	33.2
Kottmeier	Stockholm	71.9	50.5
Richards	Toronto	74.0	50.5
Campbell	Montreal	73.9	30.0
Schmitz	Chicago	75.0	40.5
McKelvey	Minnesota	80.2	54.1
Nolan	Los Angeles	73.0	49.0

TABLE 2.—*Five-Year Apparent Survival Rates for the Years 1938-1945, 1946-1948, and 1949-1951 in Cases Treated at the Radiumhemmet. (From Kottmeier.[8])*

Stage	1938-1945 No. of Cases	1938-1945 5-Year Survival Rate Per Cent	1946-1948 No. of Cases	1946-1948 5-Year Survival Rate Per Cent	1949-1951 No. of Cases	1949-1951 5-Year Survival Rate Per Cent
I	299	69.2	155	74.8	155	89.0
IIA	537	63.3	228	58.3	295	64.4
IIB	903	44.3	235	37.0	310	45.2
III	787	24.4	254	26.0	230	33.5
IV	230	11.3	78	2.5	91	7.8
I-IV	2,756	42.3	950	42.5	1,081	51.1
No treatment	119		34		11	

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This work is not to be construed as necessarily reflecting the views of the Department of the Navy.

TABLE 3.—*Prognosis (5-year Survival) After Operation for Squamous Cancer of Cervix Based on Positive and Negative Nodes.**

Author	Total No. of Cases	Positive Nodes		Negative Nodes	
		No. of Cases	5-Year Survival	No. of Cases	5-Year Survival
Wertheim (1912)	184	41	5	143	100
Bonney (1932)	339	143	34	196	98
Leidenius (1930)	21	6	0	15	9
Taussig (1934)	70	24	5	46	22
Morton (1947)	42	12	4	30	26
Meigs (1951)	85	19	5	66	58
Carter et al. (1951)	43	6	5	37	33
Sherman and Ruch (1953)	253	55	6	198	103
Total	1,037	306	64	731	449
Per cent		29.5	20.9	70.5	61.4

*From: Surgical Treatment of Cancer of the Cervix Edited by J. V. Meigs: Grune & Stratton, 1954. (Observations of Carl T. Javert.)

combination of radical operation and irradiation to tolerance is a dangerous approach to the problem as it invariably is followed by an abnormally high incidence of bowel and urinary tract complications.

The problem of delivering an adequate cancericidal dose of irradiation to the lateral pelvic nodes without producing damage to normal intervening tissue is the greatest challenge in the treatment of cervical carcinoma at the present. In an effort to meet this challenge Barnes and co-workers[4] have advocated the interstitial use of radioactive cobalt, utilizing needles in each parametrium, guided transvaginally through a specially designed plastic template. The rather high incidence of complications resultant from this method has made it quite unpopular with most clinics in this country. Cobalt^{60} in specially prepared nylon threads has also been used by Barnes[3] in an effort to deliver an adequate dose of irradiation to the mid-parametrial tissues. Under direct vision at laparotomy the threads are sewn into the node-bearing tissues and after a definite period of time again removed. Although admittedly ingenious this method is still considered to be experimental and is not in general use.

Kromer and his associates[9] have used intra-arterial nitrogen mustard in combination with conventional external irradiation to treat the pelvic nodes but with only limited success. The method is thought to have a place as an adjunct in the treatment of recurrent cervical cancer that has been previously irradiated to tolerance.

Ullery,[21] after evaluating several newer methods of management of cervical cancer, recommended cobalt^{60} in combination with conventional external irradiation as the best available method as measured by the increased salvage in the cases so treated.

Nolan and co-workers[11] in a recent report indicated that cobalt^{60} teletherapy produces a more uniform parametrial tissue dose than conventional 450 kv x-ray and it undoubtedly destroys cancer in the lymph nodes that happen to be in the direct path of the rays.

Fletcher,[6] on the other hand, reviewed the present

TABLE 4.—*Effect of Irradiation on Nodal Involvement from Reports of Various Investigators. (From Sherman and Ruch.[17])*

Name	Percentage Incidence Positive Nodes Without Irradiation	Percentage Incidence Positive Nodes Following Irradiation	Percentage Resultant Decrease
Nathanson and Meigs	32	20	37.5
Morton	39.3	11.4	70.9
Taussig	33	26.8	18.9
Authors	28.8	15.5	45.2

status of cobalt^{60} teletherapy in cancer of the cervix and other malignant tumors and concluded that clinical Stage I and II cases responded no better to this modality of treatment than to conventional x-ray as adjudged by present day salvage reports.

In a more recent paper Rutledge and Fletcher[12] reported a decided reduction in the number of cancer-bearing lymph nodes in 100 cases of Stage III cancer of the cervix that were treated by the 22 mev betatron and radical pelvic lymphadenectomy. They attributed the better results to the improved tumoricidal dose delivered to the entire pelvis by supervoltage irradiation. However, it is still too early to determine what impact, if any, this method will have on five-year salvage and post-treatment complications.

Recognizing the acute need for a better method to adequately treat the pelvic lymph nodes presumably containing cancer, Sherman and his associates[16,18] began working experimentally with radioactive colloidal gold interstitially. They demonstrated that Au^{198} when injected interstitially is immediately transported by the lymphatic channels to the regional lymph nodes and a very minimal quantity of the isotope is found in the liver and bone marrow. This has also been noted by other investigators.[16,22] Sherman and co-workers[15,18] also conceived the idea and developed the transvaginal technique for the instillation of Au^{198} into the mid-parametrial tissues in the treatment of cancer of the human cervix. In answer to criticism from several sources[5,14,20] concerning the uncontrollability of

TABLE 5.—*Radiation Contribution of Radium and Au^{198} to Various Pelvic Locations. (From Ter-Pogossian and Sherman.[19])*

Radiation Contribution	Cervix	Bladder	Rectum	Mid-parametrium
$Gold^{198}$ gamma rays (roentgens)	1,200	1,100	1,200	2,250
Radium gamma rays (roentgens)	12,000	6,000	5,000	3,350
Total gamma radiation (roentgens)	13,200	7,100	6,200	5,600
$Gold^{198}$ beta rays (rep)	0	0	0	10,600

the colloid when used interstitially, Ter-Pogossian and Sherman[19] developed the radiation dosimetry for radioactive colloidal gold and radium in the treatment of cancer of the cervix. Table 5 shows the average dosage delivered to certain fixed points in the female pelvis by radioactive colloidal gold and by radium in accordance with the Manchester System of radium dosage. It will be noted that the mid-parametrium receives 5,600 gamma roentgens from radium and the gamma component of the gold plus an average of 10,600 reps from the beta source. This is considered to be a cancericidal dose at Point "B" of the Manchester System.[19]

Certain other investigators[5,20] notably Seaman and Powers,[14] have reported upon the distribution of Au^{198} in lymph nodes containing cancer. They emphasized the inverse proportional pick-up of the Au^{198} in such nodes and said that because of this they do not favor its use interstitially. However, the encouraging progress report of Allen and his associates[1] appears to be a very convincing rebuttal in the defense of the method. Table 6 contains the most recent report of Allen's[2] results to date. It is quite evident that the patients with Stage I lesions in all groups treated, regardless of the method used, have fared equally well. It also appears that the salvage in Stage II and III cases is improved by employing radical operation after interstitial Au^{198} and conventional radium therapy.

It was following the preliminary report by Sherman and co-workers[15] that a group of investigators at the U. S. Naval Hospital in San Diego (including the author) became interested in the interstitial use of radioactive colloidal gold in combination with radium for therapy of cancer of the cervix. Since the spring of 1955 it has been our primary method of management.

Certain of the physical properties of the isotope (listed in Table 7) make this substance especially suitable for both interstitial and intracavitary use. It is a red colloid with an average particle size of 0.5 millimicrons and these particles are eagerly ingested by macrophages and transported via the lymph nodes on the periphery. Here both a gamma and beta ray are emitted, thus serving to identify the presence of the colloid in the nodes as well as effectively delivering a cancericidal dose of ionizing irradiation to the node-bearing tumor tissue.

TABLE 6.—*Patients Treated and Observed Three to Seven Years—Data Compiled from Reports in Literature. (From Allen, Sherman and Camel.[2])*

Stage	Number Treated	Alive Without Evidence of Disease	Survival Rate
Radium and Gold			
I	19	17	89.5
II	39	27	69.2
III	24	13	54.0
Total	82	57	69.5
Radium, Gold, and Wertheim			
I	63	58	92.1
II	19	16	84.2
III			
Total	82	74	90.2
All Cases. Radium and Gold With and Without Wertheim			
I	82	75	91.5
II	58	43	74.1
III	24	13	54.0
Total	164	131	79.9

Not counted as treated:
7 lost to follow-up.
3 dying of other disease with no cancer at autopsy.
1 alive with carcinoma of the breast and lung metastases.

TABLE 7.—*Physical Properties of Radioactive Gold. (From Veldhuis.[22])*

1. Colloid with red color.
2. Colloid particles are basically inert.
3. Particle size of 5.0 millimicrons (average).
4. Particles are eagerly ingested by macrophages.
5. Particles deposit rapidly and uniformly on serosal surfaces.
6. Half life of 2.7 days. Ninety-four per cent of radiation dose is delivered in eleven days.
7. Ninety-five per cent of the tissue ionization produced originates with the beta radiation. Radiation consists of three beta and three gamma rays. The 0.290 mev of gamma and 0.963 mev of beta make up about 99 per cent of the decay scheme.
8. The maximum range of the 0.963 mev of beta radiation is 3.8 millimeters in tissue.
9. The associated gamma ray serves as a convenient means of identification as well as affording some therapeutic benefit.
10. It can be shipped in convenient glass bottles for assurance of sterility.

Radioactive gold is well suited to both interstitial and intracavitary use as it can be transported easily in shielded sterile containers via airmail and has a half-life of 2.7 days. This means 94 per cent of the radiation dose will have been delivered in 11 days.

The quantity of isotope usually received from the manufacturing source is 25 to 30 milliliters with a specific radioactivity of about 8 millicuries per milliliter. Upon receipt of the package containing the isotope, it is carefully opened and the enclosed bottle of radioactive material is prepared for assay. This is accomplished by comparing the gamma irradiation of the isotope with a constant source of gamma emanation from a known quantity of radium at a constant distance. With the aid of a special formula the specific radioactivity of the colloid is easily determined. The radium source used in this calculation is always constant and is obtained from the National Bureau of Standards.

After the material is assayed it is diluted to bring the volume to 70 milliliters before it is used in a patient. This is done by a technician using a remotely controlled pipette and lifting tongs. The diluent commonly used is normal saline solution. After the volume is increased to 70 cc. the isotope is placed in a lead-shielded container and transported to the operating room.

Half of the total volume, 35 cc., is injected transvaginally into the right parametrium and a similar quantity into the left parametrium. The points of injection are the obturator space, the hypogastric region and the iliac fossa bilaterally. A 22 gauge spinal needle is bent at an arc of 45 degrees and is inserted transvaginally into each of the three areas mentioned. Ten cubic centimeters of the isotope are injected into both right and left obturator space and a similar quantity is injected into both hypogastric regions. The remaining iliac fossae both receive 15 cc. of the colloid.

This plan of injection produces a very uniform rate of absorption and dispersion pattern as depicted on the scintoscan record.

Photographs 8 inches by 10 inches are made of the original scan record and are placed in the inpatient and outpatient records of each patient treated.

The apparatus used to inject the isotope interstitially consists of a 10 cc. Luer lock syringe, a three-way automatic ball valve attachment, two lengths of 18 gauge polyethylene tubing, a weighted stirring attachment for immersing in the colloidal solution, a 22 gauge spinal needle with a lead-shielded extension and the usual instruments ordinarily prepared for the performance of dilatation and curettage.

In the operating room the entire apparatus is first filled with normal saline solution and is carefully checked for leaks, as any spill of the radioactive gold would produce a serious radiation hazard. All involved personnel wear special quantitative gamma radiation detectors and are carefully gowned and gloved as the colloid, which is composed of electronegative particles, will closely adhere to any surface. After it is determined that all connections are intact and no air bubbles are in the system the three-way valve is detached from the syringe, the adapter tip is shielded with a piece of sterile gauze and the syringe is placed inside a nonsterile 2 inch lead block. The three-way valve is then reattached to the syringe and the weighted stirring rod with its attached short length of polyethylene tubing is immersed in the radioactive colloid.

The patient is prepared and draped in the dorsal lithotomy position. The operator palpates the ischial spine on the lateral vaginal wall and directs the tip of the spinal needle with the aid of a Rochester forceps transvaginally into the obturator space. The needle passes to the pelvic wall at right angles to the vaginal mucosa and when the solid bony obstruction is met the needle is withdrawn a centimeter or so before the isotope is injected. The filling and emptying of the syringe is managed by a nonsterile member of the team, and, upon the direction of the physician in charge, 10 cc. of radioactive material is slowly injected into the obturator space. The needle is then withdrawn and reinserted transvaginally laterally and a bit superior to the first point of injection, the tip then being in the mid-parametrium near the hypogastric vessels and node-bearing tissue. Another 10 cc. of the colloid is injected at this point. The needle is again withdrawn and reinserted obliquely transvaginally into the vaginal fornix so the tip is in the region of the common iliac bifurcation in the iliac fossa. There 15 cc. of the colloid is injected. The needle is then withdrawn and the entire operation is duplicated on the opposite side.

At no time have we had any complication develop from accidental perforation of a large vessel or viscus while carrying out this technique.

Following injection of both parametria the actual radioactivity is measured at the lateral pelvic wall with the help of an instrument called the Probitron, which is a specially designed probe scintillation counter equipped with a sensitive tip. The Probitron is inserted into the bladder through the urethra and is directed to each lateral pelvic wall by a finger in the vagina. At these points readings of highest intensity are taken and are later transposed into roentgens per hour. The same readings are taken intrarectally and an average figure is then obtained. This mid-parametrial dose has been previously found to be in the neighborhood of 2250 roentgens and it is to be emphasized this is a measure of dosage from the gamma component alone. The beta irradiation contained in this volume of tis-

sue has been calculated to be in the neighborhood of 10,500 reps. and is cancericidal when contained in or immediately adjacent to a node containing carcinoma.

Up to the time of this report we had treated 48 patients with cancer of the cervix with radioactive colloidal gold to augment intra-uterine radium. The results were such as to bolster the evidence that it is thus possible to adequately irradiate the lateral pelvic nodes without compromising normal intervening tissue. One distressing complication that occurs with the use of this method is a transient obturator neuritis, but not of such a magnitude as to warrant abandonment of the procedure. We had the opportunity on a few occasions to operate upon patients who had been treated with interstitial radiogold and it was noted in most instances that there was dense scarring in the node-bearing tissue and no gross evidence of cancer. It was our impression that radical operation after the combined irradiation procedure is certainly made more difficult and probably should not be performed in any Stage I case, as it might cause a release of well entrapped viable tumor cells into the general circulation and result in distant metastasis. As to the increased survival of patients with Stage II and III lesions treated with radiogold and radical operation, as reported by Allen,[2] only the removal of positive lymph nodes not sterilized by irradiation would account for this result, which indicates that operating in the more advanced cases might improve our overall salvage.

Table 8 contains the data on all cases treated by our group. There were 40 patients with Stage I and eight with Stage II lesions originally treated. Of this total number, there are 43 patients living and well after periods of from one month to almost five years after the beginning of treatment. Thirty-seven of the patients with Stage I lesions were alive without evidence of disease and six of those with Stage II tumors were living at the time of this report. Table 9 contains data on the five patients who died. It is believed very strongly by our group that all patients treated with Au^{198} who eventually died of cancer had lesions that were much further advanced at the time of therapy than the stage of the disease determined by pelvic examination indicated. It is questionable in my mind whether radical operation would have saved any of these patients, although perhaps it should have been attempted. No emphasis is being placed upon salvage in this presentation as it is realized insufficient time has elapsed to warrant deductions on this point. However, from the results to date, we feel a general trend is becoming evident and the method is proving to be an effective weapon for the successful control of most Stage I and II and some latent Stage III cancers of the cervix.

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TABLE 8.—*Results of Treatment from April 1954 to January 1959. All Cases in Series. U. S. Naval Hospital, San Diego.*

ALL CASES TREATED WITH RADIUM AND Au^{198}

Clinical Stage	Number Treated	Number Alive Without Tumor	Number Alive With Tumor	Number Dead
I	40	37		3
II	8	6		2
	—	—	—	—
	Total 48	43		5

TABLE 9.—*Cause of Death and Autopsy Findings in Deceased Patients in Series at San Diego Naval Hospital.*

Case	Age	Race	Stage	Interval From Rx to Death	Autopsy Findings
1.	35	Cauc.	II	5 months	Carcinoma, squamous cell, grade II, cervix with generalized metastases.
18.	39	Cauc.	I	11 months	Carcinoma, squamous cell, grade IV, cervix with generalized metastases.
31.	22	Cauc.	I	6 months	Carcinoma, squamous cell, grade IV, cervix with generalized metastases.
39.	35	Cauc.	II	7 months	No autopsy performed, expired in uremia.
43.	78	Cauc.	I	5 months	Carcinoma, squamous cell, grade III, cervix with widespread metastases.

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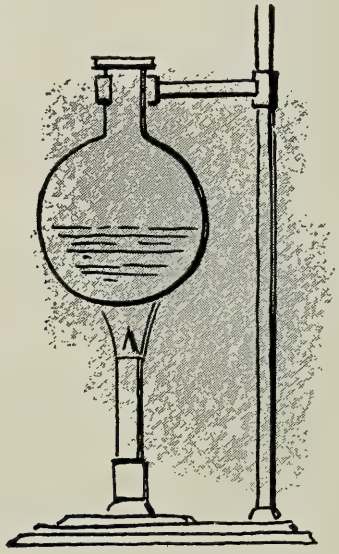
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Disability of the Back in Industrial Workers

Are Work Restrictions Justified on Roentgen Abnormalities Alone?

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• **In a company of over 75,000 employees, an analysis was made of cases of compensable disability of the back in a period of five years to determine the value, if any, of routine preemployment x-ray examination of the spine.**

Of particular interest was the relationship between the finding of spondylolisthesis and Schmorl's node to the awards. It is often difficult to offer conclusive evidence of any kind. Sometimes there is complaint of impairment of back function with no objective symptoms, sometimes no complaint at all although abnormalities are readily demonstrable.

THE QUESTION "Are work restrictions justified on the basis of x-ray films of the spine alone" is prompted by a serious problem which hangs ominously over industry—compensable backaches.

Pre-employment physical examinations as they bear on this problem, if done superficially, are worthless. Yet there are practical limits to thoroughness, for if a physical examination were to include every diagnostic procedure known and require several weeks to complete, it might be a medical ideal but it would be a financial monstrosity to the employer and a gruesome experience to the person who is only asking for a job.

How far, then, should an examination go to serve the practical purpose of knowing what an applicant can do without hurting himself, his co-workers or the employing company? Specifically, how much of an examination is required to prevent back disabilities?

To find the solution a number of medical directors of various corporations in the Los Angeles area personally discussed the merits of routine x-ray films of the spine. Some believed it would be necessary to study films of the entire spine of every applicant. Others thought that films of the lumbosacral area were sufficient unless something in the history or physical examination made additional studies advisable. I belonged to the latter school of thought and instituted that procedure.

Accordingly, when lower spine deformities were found the applicant was either rejected or certain restrictions were imposed. However, a number of men who were barred from factory work complained they previously had worked for the company and never had had back trouble and were doing work at home which far exceeded the physical demands of the jobs. Examination of the records of their previous employment by the company revealed most of these complaints were justified. These observations led to a review of the pertinent literature. An article by Fullenlove and Williams[1] listed the roentgen findings in 200 industrial workers with symptoms referrable to the back and 200 without such symptoms. The average age of the group was 40 years and the average length of service was 18 years.

The list consisted of congenital defects such as spondylolisthesis, transitional vertebrae, rudimentary discs, spina bifida occulta and sacrilization of the last lumbar vertebra. Traumatic conditions included compression of the vertebral body and fracture of the transverse process. The list also included degenerative, arthritic, neoplastic and structural conditions.

Of particular interest was the incidence of spondylolisthesis. There is a universal belief that when this condition is discovered in a routine spine x-ray of an applicant he should be rejected for factory employment because it indicates an unstable back. There were three persons with this condition among the 200 who had symptoms; there were five among those who did not. Even in the three cases of spondylolisthesis in persons with symptoms, there was no conclusive evidence that this abnormality was the one solely responsible for the symptoms.

Since "congenital defects and structural changes are about equal in number in the two groups," the authors said, "it seems doubtful that their presence *per se* is of clinical significance," and "we do not consider congenital defects or anatomical variations independently a cause of backache."

The company of which I am medical director has about 75,000 employees in various plants throughout the country. I sent the previously mentioned list of spinal abormalties included in the study by Fullenlove and Williams to the medical supervisor of each plant. Each was asked to indicate opposite the conditions listed the amount of the awards granted

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by the Industrial Accident Commissions during the previous five years.

I expected a cut-and-dried record which would quickly indicate which spinal deformities were most likely to be a financial burden to the company, thinking that on that basis the physicians would impose appropriate restrictions whenever those spinal conditions were discovered.

That is not the way it worked out at all. Take, for example, the data on cases of Schmorl's node. This is a condition recognized by concavities on opposing surfaces of vertebral bodies. Presumably this indicates a gradual penetration of disc tissue into the cancellous part of the vertebral bodies. It is a chronic degenerative change rarely due to or aggravated by trauma.

In one of the California plants (Santa Monica) during the past five years there were 45 cases in which employees received compensation awards because of disability referrable to the back. In only one of these cases was a Schmorl's node noted. In a midwestern plant (Tulsa) where there were 90 cases of compensable disability of the back during the same period, Schmorl's nodes were present in 22 cases—and were the only roentgenographic abnormality noted in those cases.

Statistics, it appeared, were not statistics at all. By simply limiting my observations to one plant or the other I could say the incidence of Schmorl's node in award cases is only 2 per cent or, with equal conviction, that the incidence is 27 per cent.

Fullenlove and Williams said that Schmorl's nodes were noted in 13 per cent of the previously mentioned 200 patients who had no symptoms referrable to the back, whereas the incidence in patients who did have symptoms was only 5.5 per cent. Again, there is nothing in the report to indicate either that the Schmorl's node was the sole x-ray finding or that it had anything to do with the actual pain in the back.

Some time ago, after an employee with spondylolisthesis had received a compensation award, one of the physicians for the company for which I work expressed belief that anyone with this condition should not be employed in the factory. Yet, of the previously mentioned 45 patients from the Santa Monica plant whose cases were brought before the Industrial Accident Commission, only three had spondylolisthesis and two of them did not receive awards.

Apparently, positive findings in films of the spine, unless due to trauma with resultant fractures, compressions or disc involvement, do not necessarily mean that a person should be restricted in his work. Of course, if there is a history of back trouble that is a different story. However, there are countless employees who have positive spine findings who have been doing hard physical work for years with no complaints referrable to the back. Even so, many industrial physicians are not impressed. They say, "Give these employees time. They will develop symptoms. It is better to put restrictions on them now."

This does sound logical except for one other fact. Awards have been given to persons who, according to the radiologist's reports, had absolutely normal spines. If we apply the principle of putting restrictions on persons who have conditions of the spine similar to those who have received awards, then everyone who has a normal spine would be restricted, too, or perhaps even refused employment.

The suggestion has been made that if films are taken of every applicant's spine, then the employer could prove the previous existence of a condition in the event of filing before the Industrial Accident Commission. But suppose we do find some abnormality of the spine, that the applicant is accepted anyway and that later he complains of a chronic backache. More films are taken and we say to the commission, "See, this man's spine is no different today than it was before we hired him."

What, exactly, does this prove? That the man does not have a backache? That it did not occur on the job? The Industrial Accident Commission is well aware that other conditions can cause a backache. The trouble is that too many physicians believe that the x-ray films of the back are the deciding factor.

This is very much like the great satisfaction that a physician derives when he is able to show a patient with a chronic backache some x-ray films of the spine and say: "Look at these films: See those spurs sticking out of the vertebrae? You have arthritis. No wonder you have a backache." The physician may be correct, but what about all the other persons with x-ray films of the spine showing exactly the same arthritic changes—spurs and all—who do not complain and never have complained of backache? Isn't it possible that these so-called arthritic patients may be suffering from any one of dozens of other reasons which can cause a backache, such as chronic prostatitis?

Members of the Industrial Accident Commission know that there may be other causes but is sometimes forced to make a decision on an x-ray finding simply because they have not been supplied with the information necessary to prove there is another reason for the pain in the back.

To think that the commission bases its awards chiefly on x-ray films of the spine indicates unfamiliarity with the method used to evaluate disabilities of the back.

Briefly, the elements that determine such disability are pain, weakness and impaired endurance—none of them demonstrable on an x-ray film. If the

sum of these elements in a given case seems to cause slight disability, the rating is from 0 to 35 per cent; if moderate, the rating will be between 40 and 65 per cent; if severe, from 70 to 100 per cent.

When someone files a claim of disability with the commission, the employer is automatically considered responsible, at first. It is up to the employer to present evidence, if there is any, to disprove that disability exists or exists to the extent claimed.

To present an x-ray film of a spine and feel confident that it will prove or disprove any of the three elements is wishful thinking. The film has the same value as any one piece in a jigsaw puzzle. It is possible for the Industrial Accident Commission to have a good idea of what the full picture is like if one or two pieces are missing, such as a pre-employment routine film of the spine.

What the commission wants, and too often fails to get, are definite answers to questions such as these:

Exactly what is the employee able to do on the job immediately before the time the rating is to be established?

If other employees aid the plaintiff in his work, is it because it is the usual procedure for the job or because of the man's disability?

How much lifting, pushing or pulling can the person do repeatedly? Is it from one level to another?

How much and what types of drugs are necessary to give relief and how often must the drugs be taken?

What are the employee's activities off the job? In what sports does he participate and to what extent and frequency?

What was the extent of the physical examination given the employee to determine his disability? Did it, for example, include a proctoscopic examination?

Some years ago the head of the Orthopedic Department at the Mayo Clinic, Dr. Henry Meyerding, told me that in an amazingly large proportion of cases complaints of backache were due to foot trouble. Yet, through the years, I have seen physicians from time to time examining a patient's back without asking him to remove his shoes.

How many physicians take the time and trouble to measure the size of the calves and thighs to see if atrophy has occurred? When testimony is presented at a hearing by the plaintiff that atrophy exists, the records of the company physician should confirm or deny it. The company physician should put on the record such observations as whether or not the back pain is aggravated by pressure on the jugular vein. He should know if there is a neoplasm or infection in the body which may be a contributing cause, if not the sole reason, for the complaint.

It is the company physician's job to make an accurate diagnosis of the patient's complaint without being concerned as to who will benefit by the diagnosis, the employee or the company. In my 30 years' experience in industrial medicine I have never known a company unwilling to fully compensate a man for an injury resulting from his job. But the company has a right to be reasonably certain that the disability actually exists and to the extent alleged and that the company is responsible for that disability. The x-ray findings alone cannot establish such a certainty.

For illumination, let us assume the opposite viewpoint and concede that x-ray findings by themselves are sufficient reason for placing restrictions, or appraising disabilities, and that x-ray films should be taken routinely of everyone applying for a factory job. We then come face to face with another problem—the effects of radiation.

It is nothing unusual today to have applicants for jobs refuse to have a single chest film taken. It isn't because they have conditions which they wish to hide, but because they fear what they believe might be the effects of the radiation. Whether or not such fear is justified is not the point. If the applicant is squeamish about x-rays of the chest, he is certainly going to hesitate to permit x-rays of the lower spinal region which are taken merely for the employer's record.

We now come to the final point—expense.

Let us consider not the big corporations with well-established medical departments and full x-ray facilities but the small industries which have a first-aid dispensary and a part-time physician who does the pre-employment physical examinations. Would it pay to have x-ray equipment installed for the chief purpose of making routine pre-employment x-ray films of the spine? If it would pay, then there would be the added advantage of having such equipment to take routine chest films and make examinations of parts of the body which may be fractured or contain foreign bodies.

The idea is most commendable, but it must be realized there is no such thing as having an x-ray machine and expecting it somehow to produce the films by itself. The average physician is not sufficiently trained to take films of excellent diagnostic quality. If a technician is hired, usually he needs an assistant to develop the films while he positions the next applicant, makes the necessary calculations for exposure, and so on. Then, of course, there are going to be x-ray records that have to be typed and filed, which means that sooner or later a typist and clerk will be needed.

The company that is willing to invest in an x-ray machine should be willing to invest in a department that is able to take care of that machine and all the ramifications that go along with it. Furthermore, the physician who does the physical examinations

should not be expected to see and interpret everything in the films with a radiologist's accuracy. Every film should be taken by a qualified technician and read by a radiologist.

The expense of an x-ray department should be weighed against the expense likely to result from Industrial Accident Commission awards resulting because such pre-employment films are not taken as a routine. It may be less expensive and a far more satisfactory arrangement for the small company to send applicants to the office of a radiologist.

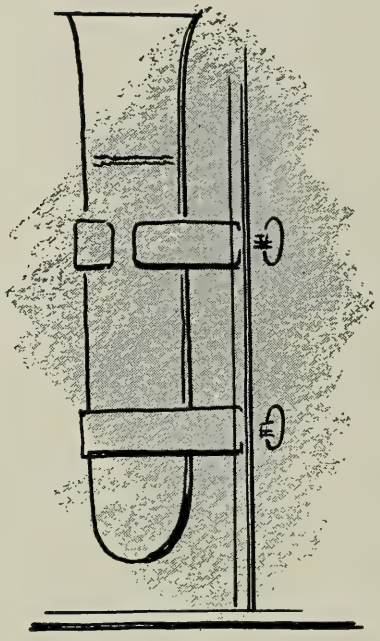
This brings us right back to the question: "Is it worth the time and money to do pre-employment routine spine x-rays?" I do not believe so. However, as I stated earlier, statistics can be supplied to prove either side of a question.

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Pyogenic Infections in Orthopedic Surgery

Prevention and Management

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• **A problem that confronts surgeons in clinical practice is that a patient may acquire new infections while in the hospital. When such infections occur they are predominantly staphylococcal and these bacteria are often, but not always resistant to penicillin, streptomycin and the tetracycline antibiotics. They are often but neither completely nor uniformly sensitive to the newer or less frequently used antimicrobial agents.**

The extension of antibiotic usage from proven situations to "routine" prophylaxis has been a widespread practice. There are many reasons to discourage and to reexamine the validity and purpose, as well as the safety of this practice. We now have sufficient background and experience to revert from widespread and indiscriminate use to a practice of discriminate prophylactic therapy.

In general, soft tissue lacerations and clean wounds do not require operation under an "antibiotic umbrella." Similarly, elective orthopedic surgical procedures of soft tissues such as muscle biopsy, tenorrhaphy and muscle and tendon transplants as well as plastic surgical procedures can be safely performed without antibiotic therapy if technique is good and operation not prolonged. Operations of major magnitude on the motor-skeletal system, such as open fractures, internal fixation of fractures with bone grafts, and major operations of joints are indication for antibiotic therapy for impending infection postoperatively for five days. Reliance is mainly on antistaphylococcal drugs to which hospital organisms are predominantly sensitive. The two remaining indications for antibiotic therapy against impending infection are: (1) major crush injury —for example, to the thigh—and (2) the need for a patient with a healing fracture to have other surgical procedures such as tooth extraction or excision of an infected area which might predispose to transient bacteremia and embolic infection in bone or joint.

THE MASS OF LITERATURE on the broad subject of hospital-acquired drug-resistant infections is immense. Although the increasing prevalence of staphylococcal and other postoperative infections has been linked to inept and excessive use of antibiotics, there is little evidence that the enthusiasm for the routine indiscriminate use of these drugs is waning. The incongruity of the present situation is this: Although there is clear evidence that the majority of infections arising in hospitals are due to organisms resistant in vitro to the three antibiotics most widely used for prophylaxis, namely penicillin, streptomycin and the tetracyclines, some surgeons insist that unless they use one or the other or a combination of these antibiotics they will be liable to criticism if infection develops.

There are many other reasons to discourage as well as reexamine the validity and the safety of the practice of chemoprophylaxis. Among factors against the indiscriminate use of antibiotics are that it:

1. Encourages laxity in practice of established aseptic techniques and prevention of cross-infections.

2. Exposes the patient to the hazards of drug idiosyncrasies, sensitization reactions, direct toxicities and superinfections with drug-resistant strains.

3. Masks and delays early diagnosis and therapy of established infection.

For purposes of discussing the situations in orthopedic surgery in which antibiotics are, or probably are, indicated, and the situations in which antibiotics are not indicated, orthopedic surgical procedures may be classified as *clean*, or *contaminated* or *infected*, according to the bacteriological content of the tissues, except skin, traversed by the scalpel.

Infected Cases

Cases in which infection is obvious, such as those in which the procedure in question is for debridement and drainage of wound abscess, sequestrectomy, management of suppurative arthritis or amputation for sepsis, require little comment. These are situations of therapy rather than of prophylaxis, and no one questions the advisability of maintaining blood-borne antimicrobial protection during and after surgical procedures. Antibiotics for protection against invasive infection during and after operation are selected on the basis of previous bacteriologic studies. The purpose of continuing therapy postoperatively until uncomplicated wound healing obtains is to assist the defense mechanisms of the body in eliminating the bacteria remaining following debridement and drainage of the infected tissues.

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Contaminated Cases

Contaminated cases include those in which there is massive crush of extremities and compound injuries of long bones and joints. The arguments in favor of antibiotic prophylaxis in trauma cases are these. In World War II it was demonstrated that massive doses of systemically administered penicillin were effective in lessening the incidence of invasive infection after excisional operation, but that antibiotic therapy was ineffective without excisional, reparative operation. Also it was generally agreed that antibiotic therapy was helpful in extending the span of time during which it is best to carry out definitive surgical intervention after trauma, and in modifying, even preventing, the development of sepsis. The general experience of surgeons who dealt with many wounded patients in World War II can be summarized in the following concept:

Wound sepsis becomes established as a result of septic decomposition of devitalized tissue, including hematoma and seroma in dead space, rather than from the action of bacteria on living tissue. The devitalized tissue serves as a pabulum for wound pathogens. If the pabulum is not present and if living tissue is protected from invasive infection by an effective blood-borne antibacterial agent, the bacterial flora of the open wound may be disregarded, wound sepsis need not be feared, and any indicated reparative procedure may be performed under established surgical principles with anticipation of good results. Since there is always uncertainty as to the thoroughness of debridement, delay of closure until a few days after initial operation became standard practice for complex wounds. Similarly, for penetrating wounds of joints, thorough excisional operation is the keystone of prevention of suppurative arthritis. Articular cartilage traumatically deprived of blood supply may be a nidus of infection and suppurative arthritis a possibility when it is permitted to remain in situ. Complete debridement of the joint, followed by closure of the synovia, instillation of a solution of penicillin and immobilization, is performed regardless of how long the time after wounding and whether or not infection is already present. The closed joint best defends itself against infection.

These concepts have stood the test of time. One possible modification is in the choice of antibiotic. For musculoskeletal injuries, including compound fractures, and for open reduction of fractures with or without internal fixation, penicillin is still the drug of choice for prophylaxis against hemolytic streptococcal and toxigenic clostridial invasive infections. For impending staphylococcal infection of bone or joint, the choice of drug or combination of drugs depends on the staphylococcal drug-resistance pattern that prevails in a particular institution or community. Solutions of bacitracin, kanamycin, neomycin or vancomycin left in situ and supplemented with chloramphenicol and erythromycin administered systemically are possibilities. Immunization to tetanus is also effected.

The experiences gained from operations in such cases of trauma serve as a baseline for appraising antibiotics for impending infection in elective surgical procedures. In incisional wounds and elective procedures there is less destruction of tissues and the potential for the growth of contaminating microorganisms is less. The risks of invasive infection are comparatively reduced although the potentialities of wound suppuration still exist. In long procedures on the motor-skeletal system, such as debridement of compound fractures, internal fixation of fractures with bone grafts, amputations—particularly disarticulations—and major excisional operations on joints, it is difficult, if not impossible, to leave behind a clean, dry field and avoid exudation of serum. Furthermore, a surface layer of dead tissue, ischemia and foreign bodies such as drains are reasonably constant factors adverse to combatting of infection by the defense mechanisms of the body. In these instances, in spite of the most diligent attention, contamination by air, droplet spread or direct surgical implantation is almost a certainty, and the danger of disastrous postoperative infection remains ever present. There is as yet no completely satisfactory prophylaxis and the older antibiotics at least have been of limited value in preventing wound suppuration.

The best adjunctive preventive measure, in the opinion of many orthopedic surgeons, is still the use of antibiotics to which the local hospital flora are sensitive. Neomycin or bacitracin with polymyxin at the time of closure deserve attention for their capacity to attenuate or eradicate bacteria in the subcutaneous tissues. Parenteral therapy for five days thereafter is used to supplement the rapidly absorbed or dissipated solution of locally applied drugs. Penicillin, streptomycin and tetracycline are now outmoded because of the wide prevalence of drug-resistant strains. Currently full therapeutic doses of a combination of erythromycin and chloramphenicol are preferred and are continued postoperatively for five days. Then if there is any sign of even subclinical infection, such as an unexplained elevation of temperature, or heat or swelling about the wound, therapy is continued as before or suitably modified.

"Clean" Cases

The special target for criticism has been the "clean" case. The report of Tachdjian and Compere[6] from Northwestern University is particularly

revealing. They analyzed the incidence of postoperative wound infections in 3,000 "clean" cases. In 1,900 antibiotic prophylaxis had been carried out and infectious complications developed in 5.9 per cent. In the remaining 1,100 no antibiotic prophylaxis was administered and the incidence of infection was only 2.6 per cent. The highest incidence of infection attended intra-articular procedures. The antibiotics employed were penicillin or a combination of penicillin and streptomycin, a tetracycline drug, and erythromycin. The highest infection rates followed the use of the first three and the lowest rate followed the use of erythromycin. The investigators concluded that perfection of surgical technique and strict observance of aseptic rules in the operating room will do more to lessen the incidence of postoperative infections than will the routine use of antibiotics; and further that chemoprophylaxis should be used only if there is a break in surgical technique, reason to anticipate infection, or infection is already present.

It is apparent from these and other experiences that minor operations on small bones and plastic and reconstructive procedures of soft tissues including tenorrhaphy, transposition of tendons, muscles and skin, and dermoplastic procedures can be safely carried out without an "antibiotic umbrella." Furthermore, since antibiotic-resistant environmental bacteria seem to prosper more in antibiotic-treated than in nontreated patients, there is no longer any justification for routine prophylaxis in clean cases, especially when the operation is short—an hour or less.

There is one possible exception to this rule, which deserves consideration—the closed reduced healing fracture of long bones in the patient who is to have other operation in a contaminated field. In this instance, there is a calculated risk of blood-borne infection to the fracture site, and, as in similar patients with valvular heart disease, antibiotic protection against metastatic infection does appear warranted. The recommended routine is similar to that suggested by the American Heart Association for patients with valvular heart disease to prevent further attacks of rheumatic fever. The antibiotics of choice are erythromycin, chloramphenicol and novobiocin, with or without penicillin.

It should be obvious from the foregoing that routine indiscriminate antibiotic prophylaxis in elective surgical conditions has served no useful purpose, has contributed to many of our problems of infection, and is in need of scrutiny. The time is here to discipline ourselves to a change from indiscriminate to discriminate use of these potent drugs.

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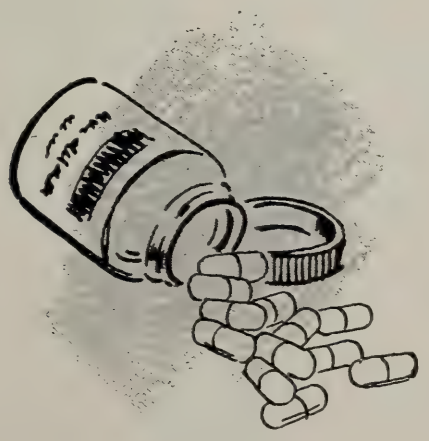
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Cancer of the Lung in Women

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• **Cancer of the lung in women has the same signs and symptoms as in men, but the disease seems to advance more rapidly. Of 35 female patients, half were under radiation therapy (for inoperable tumor) within four months after the first manifestation. In three of the five who had no symptoms, the cancer when diagnosed was inoperable.**

Scalene node biopsy confirmed metastasis in nine of the eleven cases in which it was used, and this procedure should be used after diagnosis whenever metastasis is not evident.

Of the 35 women, two received only chemotherapy, 32 radiotherapy. Only four were alive at the time of report—one without evidence of disease at 20 months, one with symptoms of disease at 11 months, two under chemotherapy at two months. For 29 who received palliative or radical irradiation to the primary tumor site, the median survival time was 26 weeks.

BEFORE 1914 the mortality rate for cancer of the lung in men and in women was approximately the same. Since that time, among the white population of the United States, the age-adjusted mortality rate has increased seven-fold for women, 35-fold for men.[2] A comparable increase in the frequency of the disease has been reported for England and Wales—30 per cent between 1951 and 1955, with the proportion of men to women about 7:1, the annual rate of increase being about 6 per cent for men, 5 per cent for women.[1] Similar trends have been noted in California, where the age-adjusted mortality for lung cancer per 100,000 population has increased as follows:[6]

	1940	1950	1956
Men	9.7	19.9	30.1
Women	3.3	4.2	5.1

Of all internal cancer reported to the California Tumor Registry for the period 1942-44, lung cancer constituted 4 per cent; for 1951-52, 6.2 per cent. By 1970, it has been predicted, the national death rate for this disease in both sexes will reach 29.4 per 100,000 population and 18 per cent of all cancer deaths.[3]

Among 283 patients with lung cancer observed at the School of Medicine, University of California at Los Angeles, between April 1955 and December 1958, 35 or about one-eighth were women. The signs and symptoms of the disease were similar to those in men, although the course seems more rapid: Half of these women were under radiation therapy within four months after the first manifestation, the average for the group being 4.8 months. In contrast, Ochsner and his co-workers reported an average delay of 12.3 months from onset of symptoms to diagnosis in a predominantly (88 per cent) male series.

Age distribution of patients is reported in Table 1, frequency of initial and early symptoms in Table 2. Although five of the patients had no symptoms, in three of these the disease when diagnosed was too far advanced for thoracotomy.

The type of carcinoma was squamous cell in five, undifferentiated in eleven, adenocarcinoma in nine. The others were not classified.

Roentgen findings were not unusual except for the great frequency of right-sided lesions—in 27 of the 35 cases.

TABLE 1.—*Age Distribution Among 35 Cases of Lung Cancer in Women*

	Age			
	30 to 39	40 to 49	50 to 59	60 to 69
Patients	3	10	7	12

TABLE 2.—*Initial and Early Symptoms of Lung Cancer in 35 Women*

	As Initial Symptom	Prior to Histologic Diagnosis
Cough	12	12
Dyspnea	8	11
Pain	3	10
Fatigability	6	7
Weight loss	3	4
Hemoptysis	3	5
Anorexia	3	4
Cyanosis	2	2
Fever	2	2
Vomiting	—	2
Dysphagia	—	1
Symptoms due to distant metastases	4	—
No symptoms	5	—

DIAGNOSIS

In those cases where symptoms did not lead to roentgen examination and finding of the lesion, it was first observed on routine chest film study. Diagnosis was then confirmed by cell study of tissue obtained in a number of ways—thoracentesis, bron-

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choscopy, scalene node biopsy or thoracotomy. Scalene node biopsy disclosed metastasis in a high proportion of cases—nine of the eleven in which it was done.

The authors' experience suggests that roentgen finding of a lesion should be followed by bronchoscopy, especially for central lesions. Evidence of cancer should lead to scalene node biopsy in accordance with the normal lymph drainage pattern of the lungs—on the right for all right-sided lesions, on both sides for lesions in the lower two-thirds of the left lung, and on the left if only the upper third of the left lung is involved. In the presence of pleural fluid, a "button" specimen obtained by thoracentesis may yield confirming histologic evidence.

TREATMENT

The preradiation treatment of the 35 patients indicates generally the extent of the disease at the time of diagnosis. In 15 no surgical treatment was considered because, despite the relatively short duration of symptoms, the disease was already far advanced. Of the remaining 19, only five underwent definitive operation (three pneumonectomy, two lobectomy)—a far lower proportion of the entire group (14 per cent) than reported by Ochsner and co-workers,[3] who obtained a resectability rate of 35 per cent for their entire series, 40 per cent for women.

All but one of the 35 patients were treated in the radiotherapy division; two with widespread disease received only nitrogen mustard therapy, and three others received only palliative irradiation of metastatic lesions. The remaining 29 received irradiation of the primary growth—palliative for 11, radical (tumor dose of 4000 r or more) for 18. Of those receiving irradiation for palliation, only one was alive 11 months after completion of treatment, while of those who had received radical irradiation in the hope of containing the tumor, only one survived at 20 months. For all 29, the median survival time was 26 weeks.

Despite the dismal picture presented above, seven of the 29 patients (24 per cent) were alive at one year. This is more than double the rate claimed by Sicher,[4] who reported 11.5 per cent survival after one year among 200 patients with inoperable lung cancer, but in this small series the apparent advantage may not be significant.

COMMENT

On the basis of experience with 283 cases of bronchogenic carcinoma in 33 months, to be reported elsewhere in detail, the authors do not regard either surgical operation or radiation as definitive treatment for cancer of the lung. Despite advances in surgical technique and more extensive operations, the five-year survival rate remains at about 6 per cent. This is poor salvage at best, particularly since the operative mortality for pneumonectomy is 18 per cent, for lobectomy 4 per cent. Nor is there definite evidence yet that megavoltage radiotherapy can improve the five-year survival rate; however, the immeasurably greater comfort of the patient during this therapy and the ease with which an adequate daily tumor dose can be administered are sufficient reasons to warrant this therapy for extensive lesions.

It is of interest that in one English therapy center, Smart and Hilton are using only radiotherapy for lung cancers considered operable by present criteria. Their current results indicate the same five-year salvage as obtained in survivors of operation, without, of course, the mortality inherent in major surgical procedures.[5]

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CASE REPORTS

Peripheral Neuritis Associated with Discoid Lupus Erythematosus

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When peripheral neuritis occurs in lupus erythematosus, the patient usually is terminally ill.* The case which is to be presented here is unusual in that the patient made a complete recovery. So far as could be determined, the combination of phenomena that occurred in this instance—namely, a self-healing polyneuritis occurring in association with an otherwise purely cutaneous lupus—makes this case unique.

REPORT OF A CASE

A 45-year-old white woman was first admitted to the Pasadena Dispensary as an out-patient on February 16, 1955. The chief complaint was of a skin eruption, of ten years' duration, involving the face and neck. A diagnosis of chronic discoid lupus erythematosus was made on the basis of the appearance of the eruption, and biopsy confirmed this impression. A complete physical examination, including review of organ systems and a complete history of past illnesses, revealed nothing of importance. Numerous laboratory tests were done, including a lupus erythematosus cell test and an x-ray film of the chest. The only abnormal result was a sedimentation rate (Westergren method) of 55 mm. in one hour.

Except for the dermal lesions, the patient felt herself to be in good health. She was the only support of an invalid husband and she worked six days a week as a waitress. Aralen was administered (500 mg. daily) and the cutaneous lesions cleared. The patient continued to work and was in excellent health until November, 1955, when her husband died. Soon afterward evidence of a reactive depression was noted when she visited the clinic. She felt that life had lost all its meaning and that it was not worth while to go on. She frequently wept during the course of a visit and she said that thoughts of suicide were tempting her. Her only son had married a few months previously and this accentuated her feeling of loneliness and abandonment. In December she complained of difficulty in raising her arms, of difficulty in rising from a chair, of a heavy feeling in the legs, of weakness in the legs and swelling of the lower legs. A neurological examination disclosed no abnormality. An electromyogram was made of the muscles receiving innervation via the anterior primary divisions of the second lumbar through the second sacral roots on the left side. The results of this examination were within normal limits.

The patient continued to work but her complaints increased. She was often tearful during clinic visits and in conversation gave evidence of continued depression. In February a 24-hour specimen of urine was examined for uroporphyrin but the reaction was negative. The cell contents of the blood and results of urinalysis remained within normal limits, and the patient was not febrile at any time.

On August 16, 1956, the patient was admitted to the Huntington Memorial Hospital because she was unable to walk. On complete physical examination the only abnormality noted was areflexia of the upper and lower extremities. A neurological consultant was of the opinion that "obvious peripheral polyneuritis" was present. An electroencephalogram made August 22, was within normal limits. Electromyograms were done on selected muscles supplied by the anterior and posterior primary divisions of the first lumbar through the third sacral roots bilaterally. Moderate changes of denervated activity were recorded in the muscles of the feet and legs and some in the thighs. No denervated activity was recorded in the pelvic girdle and none in the muscles of the back. The changes were peripheral, involving the lumbosacral plexes, both on the right and the left. The muscles of the upper limbs were not tested. The changes were consistent with a diagnosis of peripheral neuritis.

During the patient's stay in hospital, the body temperature remained normal. Results of all laboratory tests, including a lupus erythematosus cell test, blood protein analysis, serological tests for syphilis, determination of clotting and bleeding times, roentgenograms of the chest, erythrocyte and leukocyte counts, cephalin flocculation and sedimentation rate were within normal limits. No abnormalities were noted on examination of the spinal fluid or in a

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*References 1, 2, 3, 4, 5, 7, 8.

detailed ophthalmological examination, performed by an ophthalmologist.

During the patient's stay in the hospital, Aralen was discontinued because of suspicion (later shown to be unfounded) that it might have caused the neuritis.

As the degree of disability forbade the patient's returning to work, the issue of her going to live in her son's home was forced. During the stay in hospital, administration of prednisolone, 10 mg. daily, was begun, and a week later when she left the hospital the patient was walking. However, the use of prednisolone had to be discontinued after three weeks because of gastric distress.

For the next two and a half years, the patient lived in her son's home doing light household tasks. There never again was overt evidence of the reactive depression which had been so apparent at the time of her entering the hospital. During these years results of repeated urinalysis, blood cell counts, and determination of sedimentation rate were always within normal range and the patient was never febrile. A neurological consultant who examined the patient in February, 1959, reported a complete recovery from the peripheral neuritis. The discoid lupus of the face was also almost entirely cleared.

DISCUSSION

It cannot be proved that in this patient peripheral neuritis was caused by lupus erythematosus. However, this connection cannot be proved absolutely in any patient who has lupus and peripheral neuritis since the two conditions are only rarely associated and the pathological findings in those nerves which have been studied under the microscope in the reported cases are not uniquely different from those found in other collagen diseases. What sets the present case apart from the others that have been reported with this concurrence is the fact that the patient did not die.

An aspect of this case—and one usually not mentioned in reports of cases of lupus erythematosus—was the effect of emotionally charged events in the patient's life on the course of the lupus. In this patient, peripheral neuritis appeared after the husband died. The patient was an immigrant with no roots in the community in which she was living. The marriage of her only son and the death of her husband, in rapid succession, caused a reactive depression which chronologically was related to the appearance of neuritis. Whether or not it was the actual cause of neuritis is a question that cannot be answered. It should be noted in this connection that some investigators have expressed a belief that a reactive depression may usher in an attack of disseminated lupus erythematosus.[6]

When the patient went to live in her son's home, her depression abated, and later the neuritis and lupus cleared also, even though active medical treatment had been discontinued. Whether or not this change in the patient's life was partially responsible for the lessening of the organic diseases is another unanswerable question.

SUMMARY

In the present case peripheral polyneuritis occurred in association with discoid lupus erythematosus. This is the first case so far reported in the literature in which such an association has occurred. An attempt has been made in this report to touch upon a neglected subject in the literature of lupus erythematosus—namely, the influence of psychological factors on the disease in certain patients.

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Temporal Arteritis

A Report of Two Cases Without Systemic Symptoms

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TEMPORAL ARTERITIS is a rare disease that is being recognized with increasing frequency. It has usually been regarded as a localized disease of the temporal arteries,[6,9,11] but gradually the description of the disease has been expanded to include not only all the cranial arteries,[2,17] but almost any other artery in the body. It has been described as occurring in the coronary arteries[9,13] and in other larger arteries.[4]

Submitted July 20, 1959.

The clinical features of the disease were first described by Hutchinson in 1890,[10] but it was not until 1932 that the pathologic features were described, by Horton, Magath and Brown.[8]

This disease is invariably described as one accompanied by systemic symptoms of fever, chills, loss of weight, anemia, leukocytosis and accelerated erythrocyte sedimentation rate.[4,6,12,13] It occurs chiefly in women between the ages of 55 and 80.[2,8,13] It is extremely rare in Negroes.[9] The disease is self-limited, lasting from one to 20 months, the average being about 12 months.[3,13] The local features are described as consisting of bead-like, reddened temporal arteries which are very tender to touch, with excruciating headache over the involved area.* The cranial symptoms are usually described as lethargy, mental retardation, vertigo, dysarthria, delirium and painful jaws and mouth.[2,8,11] In about one-third of the cases there is ophthalmic involvement, such as diplopia, photophobia and visual field defects, and permanent blindness often occurs.[11,17]

Temporal arteritis is a disease of unknown cause, although it has been thought to be a hypersensitivity state which may be part of the systemic disease of periarteritis nodosa.[4] It has also been thought to be a bacterial disease, but repeated bacterial studies have been inconclusive.[9] Some authorities believe it to be merely a manifestation of arteriosclerosis, but the evidence is more in favor of a granulomatous or inflammatory process. The occurrence of a case in a woman, aged 25, would tend to discredit the arteriosclerotic concept.[14]

Microscopically the lesions of this disease are rather characteristic and give the impression of a generalized granulomatous and inflammatory process involving all the layers of the arterial wall.[3,12] The adventitia shows infiltration with neutrophils, lymphocytes, and rarely eosinophils. There is medial necrosis, and characteristic foreign body giant cells of the Langhans type are always found in the media. There is a fibrous tissue infiltration of the intima, and sometimes thrombi may be seen in the narrowed lumen of the vessel.[8,11,13] In the eye, the pathologic changes are those of ischemia or ischemic infarction of the optic nerve.[17]

Although the question has not yet been resolved with any degree of finality, evidence is accumulating that temporal arteritis is a systemic and generalized disease. It has been said that it is merely a localized manifestation of periarteritis nodosa,[2] but there is some convincing evidence against this concept. In periarteritis nodosa only the smaller arteries (3 mm. or 4 mm.) are involved; whereas in temporal arteritis the larger arteries are the site of the disease. There is no aneurysmal formation of the arteries in temporal arteritis as there is in periarteritis nodosa. Finally, the characteristic medial necrosis and giant cell formation which is always found in temporal arteritis is rarely, if ever, seen in periarteritis nodosa,[8,11,12] and furthermore in temporal arteritis the eosinophils are scarce in the artery wall. Clinically, the disease differs from periarteritis nodosa by its relatively benign course. It can not be said to differ clinically in its localization, for evidence is accumulating that the characteristic pathologic lesions, heretofore described only in the temporal arteries, may be found in many other arteries.[2,4,13]

The treatment of temporal arteritis was not too satisfactory until the advent of steroid therapy in 1950.[3,5,11,15] Until then, the most widely used treatment was either procaine infiltration about the involved vessel or excision of a portion of it. It was felt that the symptomatic improvement resulting from these measures was due to interruption of periarterial sensory fibers.[6,14] Many other treatments have been used but have not stood the test of time. These include the administration of antihistamines, antibiotics, iodides, sulfonamides, cobra venom, nicotinic acid, thiamine, mercury and local x-ray therapy.[7,15,16] A recent case report told of the successful use of phenylbutazone in therapy.[1]

The following two cases are being reported because they are thought to be of unusual interest in that in each case temporal arteritis was present in a fairly localized manner without any systemic symptoms whatever.

REPORTS OF CASES

Case 1. A 66-year-old white woman was first observed in the office on February 12, 1959, with chief complaint of severe generalized headaches and "knots on the head" for one month. She also complained of some lacrimation in the right eye. She had been seen elsewhere and treated with Empirin and codeine with no relief. The headaches were becoming progressively worse, and would even wake her at night. She had had no loss of weight, no weakness or fever.

The patient had had a thyroidectomy three years previously for toxic goiter, an operation for herniated intervertebral disc in 1945 and exploratory laparotomy in 1922 and again in 1950, with no pathologic condition found in either instance.

Upon physical examination a decided fullness and beading of the temporal arteries, which were reddened and tender, was noted. The patient was obese. The temperature was 98.0° F. The blood pressure was 140/80 mm. of mercury.

Hemoglobin content was 12.7 gm. per 100 cc. Erythrocytes numbered 4.7 million per cu. mm., and the leukocyte count was 10,000 per cu. mm. with a differential of 68 per cent polymorphonuclears, 26 per cent lymphocytes, 1 per cent eosinophils and 5 per cent monocytes. The erythrocyte sedimentation rate was 54 mm. in one hour. An electrocardiogram was within normal limits. No abnormality was seen in an x-ray film of the chest. Results of urinalysis revealed no abnormalities.

*References 2, 5, 10, 11, 13.

Administration of dexamethasone was begun, 0.75 mg. three times a day, and the next day the patient had complete relief of headache. A biopsy specimen from the left temporal artery showed a pronounced inflammatory process involving all the layers of the artery. The adventitia was infiltrated with neutrophils and leukocytes and there were no eosinophils. Necrosis and giant cells were seen in the media, and there was decided proliferation of fibrous tissue of the intima.

The dose of dexamethasone was gradually reduced until the patient was receiving a maintenance dose of 0.75 mg. daily. When last seen on May 26, 1959, she was still asymptomatic, but the erythrocyte sedimentation rate still was 51 mm. in one hour.

CASE 2. A 70-year-old white woman was first seen in the office on May 11, 1959, with complaint of severe generalized headaches for two weeks. She had had a head cold with bilateral earache two weeks previously and had been treated with penicillin. She had been seen elsewhere and given codeine with no relief. The headaches became progressively worse. There were no complaints referrable to the eyes, and no weakness, fever, loss of weight or anorexia.

Hysterectomy for prolapsed uterus had been done six months previously. Otherwise the patient always had been in good health.

On examination the temporal arteries on both sides were observed to be distended and reddened and extremely tender to touch. Nodules could be palpated along the course of the vessels. The blood pressure was 150/80 mm. of mercury and the body temperature was 97.8° F.

Erythrocytes numbered 4.4 million per cu. mm. and the hemoglobin content was 12.0 gm. per 100 cc. Leukocytes numbered 10,400 per cu. mm.—73 per cent polymorphonuclears, 26 per cent lymphocytes and 1 per cent monocytes. The erythrocyte sedimentation rate was 54 mm. in one hour. An electrocardiogram was within normal limits. Results of urinalysis revealed no abnormalities.

A clinical diagnosis of temporal arteritis was made, and the patient was given dexamethasone, 0.75 mg. three times a day. By the following day, she had complete relief of the headache. Biopsy of a specimen of the right temporal artery was done and changes typical of temporal arteritis were seen —pronounced inflammatory involvement of all the layers of the vessel, with many neutrophils and lymphocytes in the adventitia; an occasional eosinophil; decided medial necrosis and foreign body cells of Langhans type; and fibrous tissue inflammation of the intima.

The dose of dexamethasone was gradually reduced to a maintenance level of 0.75 mg. daily. When last seen, on June 30, 1959, the patient was still completely asymptomatic, although the erythrocyte sedimentation rate was 50 mm. in one hour.

COMMENT

In each of the two cases the circumstances and symptoms were typical, as far as they went, of temporal arteritis. An elderly white woman with excruciating headaches unrelieved by strong analgesics, the temporal arteries bead-like, prominent and inflamed. Missing, however, were the anorexia, fever, loss of weight, leukocytosis and weakness described in so many of the some 350 cases reported in the literature. Each had, however, a persistently accelerated erythrocyte sedimentation rate, which, although in itself not necessarily indicative of systemic disease, is frequently a concomitant of localized inflammatory disease of many types.

Perhaps the early diagnosis and treatment in these cases restricted the disease process; or perhaps the early abatement of symptoms lends support to the idea that temporal arteritis may be a process localized to the temporal arteries only.

This report is also believed to be the first in which use of dexamethasone for temporal arteritis is described.

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California MEDICINE

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EDITORIAL

A Study of C.M.A. Scientific and Educational Functions

WHEN Heller Associates was hired to make an investigation of the organizational structure of the California Medical Association some time ago, its main concern was with administrative structure and efficiency. This firm of experts in matters of business procedures was admittedly not equipped to make a study or recommendations with regard to what we must look upon as the very soul of our state medical association—our constitutional pledge "to promote the science and art of medicine, the protection of public health, and the betterment of the medical profession." These are matters with which the scientific and educational functions of the association are vitally intimate.

It behooves an organization whose scientific meetings are now no better attended than they were when the membership was half the present number, to look into the reasons for this apparent symptom of failure in a cardinal service.

Recently, recognizing that what the California Medical Association does now in its scientific and educational activities will affect not only its members today but many new ones over the next quarter century, the Council directed that a study be carried out entailing generally all the scientific and educational functions of the association, specifically these five:

1. The annual scientific session.
2. Postgraduate courses.
3. The journal, CALIFORNIA MEDICINE.
4. The Cancer Commission.
5. Audio-Digest Foundation.

Should these functions be continued, enlarged, altered, added to, discontinued?

Beyond these specific categories, quite obviously, study of these elements of the Association must extend to their inter-relationship with similar functions of other organizations. It must be recognized, for example, that intelligent inquiry into the diminishing stature of the C.M.A. Annual Scientific Session must take into account such related matters as the growing number of meetings by various specialty organizations that conflict with ours both as to dates and scope of interest. Nor can our postgraduate courses be properly appraised and directed without consideration of similar courses offered by medical schools, by specialty groups, by hospitals, by voluntary health agencies, and, recently, by pharmaceutical houses.

The committee which the Council authorized be appointed to make the study was selected to include physicians who, among them, can bring to the project special information and expert opinion not only as to the availability and worth of various means of education but also as to the sort of facilities most needed.*

Among the many avenues of inquiry related to the study that were developed at the first meeting of the committee were:

- Ways to overcome the "psychological isolation" of physicians practicing in areas remote from centers of medical research and teaching.
- The difference between the postgraduate needs of physicians of different ages and distances from research centers.
- The need for clinically oriented programs and also for a balance of courses between clinical and medico-economic subjects.
- The place of voluntary health agencies and, more recently, pharmaceutical houses, in the programming of postgraduate courses.

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John B. de C. M. Saunders, Dean, University of California School of Medicine, San Francisco.
Joseph W. Telford, San Diego, past president of the California Academy of General Practice and now a member of that organization's membership commission.
Dwight L. Wilbur, editor, CALIFORNIA MEDICINE, chairman.

- The possibility that the medical association might in some way serve as a coordinator of postgraduate educational activities by various agencies.
- The possibility that the official journal, CALIFORNIA MEDICINE, might better serve as an educational device if converted to a regional or national journal that would give a wider audience to authors reporting original work.

The very complexity of the problem indicates the importance of definitive work by the committee in the best interest of a salient constitutional purpose of the California Medical Association. The study now going forward, and the recommendations that can be expected to come of it, can be cogent forces in the future stature and prestige of the California Medical Association.

Forand Time Again

THIS MONTH the final session of the 86th Congress will convene and will pick up for consideration a number of legislative proposals that have been introduced and sent partially along their way through the Washington grist mill.

Among these bills will be the proposal of Mr. Aime Forand of Rhode Island, a measure which has had physicians wondering for more than a year if this, too, can come to pass.

Mr. Forand has suggested that Social Security taxes be increased again and that the tax proceeds be used to provide surgical, hospital and nursing-home care for beneficiaries of the Social Security program.

His approach has been considered a direct plan to institute a system of governmental medical care. While the term "socialized medicine" has not been used extensively by opponents of the plan, it is obvious that where Government provides the cost of these professional services it effectively sets up a system of sponsored and controlled medical care which can hardly be characterized by any lesser epithet.

While this consideration has been obvious to medical leaders for some time, the shrugging reactions of some physicians have come as a shock to experienced observers in the field of medical legislation. Apparently some of them have reviewed the results of medical legislation in the past few years, have figured that an election year is always a time chosen by politicians for augmenting Social Security benefits, and have resigned themselves to an impending program which, though greatly to their dislike, is a bitter pill they must swallow.

Such a reaction is not new in California. When then Governor Earl Warren proposed to the 1945 State Legislature that it enact a bill to establish a statewide system of compulsory medical care under a tax system, there were quite a few California physicians who assumed that the measure would prevail. Their calculations took into account a powerful and popular governor, the announced support of the large labor organizations and the less vocal but ever-present support of large and politically active women's organizations. This combination, they estimated, would be too powerful for the medical profession to oppose.

Even among the officers of the California Medical Association there were, at that time, some who believed the legislation was inevitable and that organized medicine in California might as well accept it and try to guide and work with it.

On the other side of the coin, there were many medical leaders in California who announced their immediate and unalterable opposition to legislation of this type. Their reply to the claim of inevitability was that "nothing is inevitable unless we permit it to become so."

These leaders assayed Mr. Warren's proposal and found it wanting in a good many respects. They saw the regimentation of physicians as state employees; the regimentation of patients as numbered beneficiaries rather than individual persons; the removal of incentive for a physician to advance in his profession; the lowering of the prestige of medicine as a profession and the flight of coming qualified students into other fields. They saw also the economic and social consequences of a law which would in effect confiscate in the name of the state a noble profession which had augmented its effectiveness and its knowledge over more than a century of modern progress. If a profession could thus be taken over, why not the corner grocery store? The lawyer? The gasoline merchant?

It was on these grounds that the C.M.A. took sides against the Governor and his allies in 1945—and won. When the Governor came out with the same proposal two years later, and again four years later, his influence in the Legislature was hardly noticeable. Both bills were ignominiously killed.

Since 1945 California has welcomed thousands of new physicians into its borders. The California Medical Association has practically tripled in size in that time and it is apparent that many physicians now in the state are not personally aware of the battle that raged in Sacramento and which made its effects felt throughout the country.

Thus it is not surprising that some physicians in our midst today do not readily visualize the defeat of so-called popular legislation by dedicated physicians who stand on principle.

The Forand Bill, aside from its obvious threat of socialization, has many social and economic aspects which make it undesirable legislation. Physicians, as citizens, should be aware of these defects and should rise in opposition as citizens and taxpayers as well as professional men.

Physicians in their professional capacity realize also that Mr. Forand has not selected the real needs of older people in proposing surgical and hospital services for them. Experience shows that their real needs are in the field of routine visits for chronic conditions. If Congress is to augment the benefits of Social Security it should do so realistically. No concern has been expressed for one-third of the older people who are not covered by Social Security.

The medical profession, if it is to retain its position of community leadership, must fight this measure with all the strength and resources at its command. It must point out to the Congress and to the American people that this is one more step of invasion by Government of fields of responsibility which must be reserved for the people. It must reiterate the assertion used in California in 1945 that "there is nothing in the field of medical care that the medical profession itself cannot do better, and at less cost, than Government."

That private enterprise has not been asleep in considering the needs of our older citizens is amply demonstrated in the number of Blue Shield and private insurance plans which have been developed for this group of people in the past two years. While there is some variation among the many plans now on the market, there is adequate evidence that private enterprise has brought out *something* and there is historical background for anticipating that today's experiments will result in tomorrow's programs. From just such modest beginnings have sprung all today's health insurance underwriters and their millions of participating policyholders.

Throughout the country, medical societies are working to prove to the members of Congress that these facts must be recognized and that legislation of this type must be defeated. In California a well planned and well organized program is under way among the county medical societies to achieve this end. The same is true in the other states.

To the defeatists and apologists in our midst, a measure of firmness seems to be indicated. Where these members base their feeling of inevitability on the fact that Congress has expanded the Social Security laws in each election year, it should be remembered that there are a number of other Social Security proposals before Congress many of them more logical than the Forand Bill. There are other proposals which would provide automatic benefits for all Social Security beneficiaries at age 72, regardless of other income. There are also proposals which would expand upward from the present $1,200 annually the amount which a retired person might earn without suffering a cut in his Social Security benefits. As recently as December 13, Senator Hartke of Indiana announced his intention of offering legislation for removing "certain limitations on the amount of outside income Social Security recipients may earn."

Alternate proposals such as these leave the members of Congress in the position of voting in favor of additional largesse for the people without setting up a new system of governmental medical care and without raising taxes. Such proposals would appear to give the legislators a chance to give something to the voters with one hand and not take it away in the form of taxes with the other.

The medical profession must, and will, oppose Forand-type legislation. Enlightened self-interest alone dictates that such opposition must be mounted and carried on as vigorously as possible. In addition, the responsibilities of citizenship argue that this form of bill be defeated. We must have all confidence in our medical leaders in realizing that they will give this fight every ounce of their strength and resources. They cannot do otherwise.

It is fortunate that some of the calmer heads in Congress have come up with proposals which will have a wide popular appeal and will not exhibit the deleterious aspects that Mr. Forand has included in his proposal. Let us hope that the Congress will heed Senator Hartke and others in favoring the less radical proposals for Social Security amendments.

Health Report

BECAUSE professional politicians often seem to choose persons for appointive offices more to reward the appointee for partisan services to a political party than for special ability to do the job assigned, the term "political appointment" has come to be considered one of opprobrium. Yet these words can be at once lifted to grace simply by applying them to an event that is obviously for the public weal.

Witnesseth: Dr. Malcolm Merrill was recently reappointed by Governor Edmund G. Brown to a four-year term as California's director of public health. Dr. Merrill was twice before appointed to the post by then Governor Goodwin Knight.

We suspect that the choice was not difficult for either of these politicians, one a Democrat, the other a Republican, to make. Choosing for the job a man who does the job outstandingly well—that's political appointment in its very best use.

California MEDICAL ASSOCIATION

NOTICES & REPORTS

A.M.A. Meeting

The following summary of actions of the House of Delegates at the American Medical Association's Thirteenth Clinical Meeting, held December 1-4, 1959, in Dallas, is not intended as a detailed report on all actions taken. It has been composited from reports by Mr. Ed Clancy, director of public relations of the California Medical Association, and by Dr. F. J. L. Blasingame, executive vice-president of the American Medical Association.

FREEDOM OF CHOICE of physician, relations between physicians and hospitals, a scholarship program for deserving medical students and relative value studies of medical services were among the major subjects acted upon by the House of Delegates at the American Medical Association's Thirteenth Clinical Meeting held December 1 to 4 in Dallas.

Of the resolutions introduced to the House, sent to reference committees and reported back at the final session, the policy statement introduced by Dr. Dwight H. Murray, Napa, relative to voluntary health insurance, was perhaps one of the most important to receive unanimous approval.

REITERATION OF A.M.A. SUPPORT OF BLUE SHIELD CONCEPT

Introduced on behalf of the California, Florida, Michigan, Nebraska, New York and North Dakota delegations, the resolution states:

WHEREAS, The traditional concern of the American Medical Association has been to serve the health needs of the American people; and

WHEREAS, Changes in the economic and social characteristics of the American people have made necessary the development of prepayment mechanisms for assisting in the payment of their medical care costs; and

WHEREAS, This has resulted in the development of a widespread and effective system of voluntary health insurance; and

WHEREAS, Local physicians' sponsored and approved community prepayment medical care plans have become a most effective mechanism in this voluntary system; therefore be it

Resolved, That (1) the A.M.A. reiterate its support of the Blue Shield concept; and (2) the Council on Medical Service be directed to prepare and submit to the House of Delegates at the June 1960 meeting its recommendations as to a full statement of policy with respect to the American Medical Association's relationship with Blue Shield plans.

FREEDOM OF CHOICE

An amendment to the Report of the Reference Committee on Insurance and Medical Services, reaffirmed medicine's position on the importance of freedom of choice of physician "to optimal medical care."

The report stated:

"Lest there be any misunderstanding we state unequivocally that the A.M.A. firmly subscribes to freedom of choice of physician and free competition among physicians as being prerequisites to optimal medical care. The benefits of any system which provides medical care must be judged on the degree to which it allows or abridges such freedom of choice and such competition."

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PHYSICIAN-HOSPITAL RELATIONS

The House received twelve resolutions on the subject of relationships between physicians and hospitals. To resolve any doubt about its position, the House did not act upon any of the resolutions but instead reaffirmed the 1951 "Guides for Conduct of Physicians in Relationships with Institutions." It also declared that "all subsequent or inconsistent actions are considered superseded."

The House also accepted recommendations that (1) the House of Delegates acknowledge the need to strengthen relationships with hospitals by action at state and local levels, (2) the Board of Trustees of the Association continue to maintain liaison with the Board of Trustees of the American Hospital Association, and (3) the Council on Medical Service review this entire problem to ascertain if there have been actions inconsistent with the 1951 Guides.

Those Guides summarize the following general principles as a basis for adjusting controversies:

"1. A physician should not dispose of his professional attainments or services to any hospital, corporation or lay body by whatever name called or however organized under terms or conditions which permit the sale of the services of that physician by such agency for a fee.

"2. Where a hospital is not selling the services of a physician, the financial arrangement if any between the hospital and the physician properly may be placed on any mutually satisfactory basis. This refers to the remuneration of a physician for teaching or research or charitable services or the like. Corporations or other lay bodies properly may provide such services and employ or otherwise engage doctors for those purposes.

"3. The practice of anesthesiology, pathology, physical medicine and radiology are an integral part of the practice of medicine in the same category as the practice of surgery, internal medicine or any other designated field of medicine."

SCHOLARSHIP PROGRAM

To help meet the need for an increasing number of physicians in the future, the House approved the creation of a special study committee which was asked to:

1. Present a scholarship program, its development, administration and the role of the American Medical Association in fulfilling it.

2. Ascertain the maximum to which medical schools could expand their student bodies while maintaining the quality of medical education.

3. Ascertain what universities can support new medical schools with qualified students and sufficient clinical material for teaching—either on a two-year or a full four-year basis.

4. Investigate the securing of competent medical faculties.

5. Investigate financing of expansion and establishment of medical schools.

6. Investigate financing of medical education as to the most economical methods of obtaining high quality medical training.

7. Develop methods of getting well-qualified students to undertake the study of medicine.

8. Investigate the possibility of relaxing rigid geographic restrictions on the admission of students to medical schools.

The House urged that the special committee be implemented promptly with adequate funds and staff so that it may make an initial report by June, 1960.

RELATIVE VALUE STUDIES

Reaffirming a previous policy statement, the House approved in principle the conducting of relative value studies by each state medical society, rather than a nationwide study or a series of regional studies by the A.M.A. The House also reiterated its authorization for the Committee on Medical Practices to inform each state medical association, through regional or other meetings, of the purpose, scope and objectives of such studies, the steps to be followed in conducting studies, the problems which may be encountered and the manner in which the results can be applied.

The House recognized, however, that some state medical societies are either not interested in relative value studies or are actively opposed to them. It pointed out that some state medical associations fear that the regional conferences of the Committee on Medical Practices will put pressure on them to carry out such studies and that this will result in the adoption of "fixed fees."

Since the regional conferences are educational in nature, the House said, it remains for each state or county medical association to accept or reject the idea of a study in its area.

The House expressed awareness of the fact that this is still a controversial matter. However, it commended the Committee on Medical Practices for its effort to carry out the instructions of the House, and it urged the committee to continue its educational work.

MISCELLANEOUS ACTIONS

In considering 44 resolutions and a large volume of annual, supplementary and special reports, the House also:

Learned that the A.M.A. Board of Trustees has appointed a liaison committee to meet with a similar committee of the **American Osteopathic Association** to consider matters of common concern:

Emphasized that local medical societies should insure that no member violates ethical traditions as they relate to ownership of **pharmacies** or stock in pharmaceutical companies.

Approved the plan of the Committee on Medical Rating of Physical Impairment to publish its new guide on the **cardiovascular system** in the *A.M.A. Journal;*

Called for investigation of the need, desirability and feasibility of establishing a home for **aged and retired physicians;**

Commended **Dr. F. S. Crockett,** retiring chairman of the Council on Rural Health, for his many years of devoted duty;

Urged active promotion and careful study of the newly developed "Guides for Medical Care in **Nursing Homes** and Related Facilities";

Suggested that fees for consultative examinations under programs of the **Bureau of Old Age and Survivors Insurance** should be adjudicated directly between the state medical society and the state agency involved;

Registered a strong protest to the **Veterans Administration,** urging stricter screening of non-service-connected disability patients admitted to government hospitals;

Reiterated the Association's support of the **Blue Shield** concept and directed the Council on Medical Service to submit at the June, 1960, meeting its recommendations concerning a policy statement on A.M.A. relationship with Blue Shield plans;

Suggested that S.J. Res. 41, a bill which would institute a separate program of **international medical research,** be delayed until an over-all assessment can be made of proposals now before Congress dealing with domestic and international medical research;

Endorsed the program of the **Educational Council for Foreign Medical Graduates** but also urged that judicious consideration be given to local problems involved in the July 1, 1960, deadline for certification of foreign graduates;

Urged that **medical schools** include in their curricula a course on the social, political and economic aspects of medicine;

Declared that the threat of **nuclear warfare** has imposed a tremendous responsibility on the medical profession, which must be prepared to assume a critically important role in such an event;

Suggested that the A.M.A. make available to school libraries **information and literature** showing the advantages of private medical care and the American free enterprise system;

Stated that examinations to determine the physical and mental fitness of **aircraft crew members** should be made by doctors of medicine with special knowledge and proficiency in certain techniques;

Urged the American people to get proper **tetanus toxoid,** original and booster, and other immunizations as indicated from their physicians, and called on A.M.A. members to cooperate in an educational program on tetanus immunization;

Recommended that all state and county medical societies establish programs for the inspection and testing of all **fluoroscopes and radiographic equipment;**

Approved the Speaker's proposal that the opening session of the House, at the **Interim Meeting,** be moved from Tuesday morning to Monday morning, with the reference committees meeting on Tuesday and the House reconvening on Wednesday afternoon;

Called upon each individual physician to wage "a vigorous, dynamic and uncompromising fight" against the **Forand type of legislation;**

Urged state and local medical societies and individual physicians to implement the A.M.A. program for recruitment of high-grade **medical students;**

Accepted with appreciation a $2,500 contribution by Smith, Kline and French Laboratories toward establishment of a suitable award honoring the name of **Dr. Thomas G. Hull,** retiring secretary of the Council on Scientific Assembly, and

Reaffirmed the "Suggested Guides to Relations Between Medical Societies and **Voluntary Health Agencies,"** which were adopted at the December, 1957, meeting in Philadelphia.

At the Tuesday opening session, six state medical societies presented nearly $250,00 to the **American Medical Education Foundation.** The checks turned over to Dr. George F. Lull, president of A.M.E.F., were: **California,** $156,562; Indiana, $35,570; New York, $19,546; Utah, $10,355; New Jersey, $10,000, and Arizona, $9,263.

California Medical Association

Minutes of the 453rd Meeting of the Council, Ambassador Hotel, Los Angeles, Saturday, October 31, 1959.

The meeting was called to order in the Frenchette Room of the Ambassador Hotel, Los Angeles, on Saturday, October 31, 1959, at 9:30 a.m. by Dr. Samuel R. Sherman, Vice-Chairman.

Roll Call:

Present were President Reynolds, President-Elect Foster, Speaker Doyle, Vice-Speaker Heron, Secretary Hosmer, Editor Wilbur and Councilors MacLaggan, Wheeler, Todd, Quinn, O'Neill, Kirchner, O'Connor, Shaw, Gifford, Harrington, Davis, Sherman, Campbell, Bostick and Teall. Absent for cause, Councilor Lum.

A quorum present and acting.

Present by invitation were Messrs. Hunton, Thomas, Clancy, Collins, Marvin, Whelan, Salisbury and Dr. Batchelder of C.M.A. staff; Messrs. Hassard and Huber of legal counsel; county executives Scheuber of Alameda-Contra Costa, Geisert of Kern, Field of Los Angeles, Brayer of Riverside, Donmyer of San Bernardino, Nute of San Diego, Neick of San Francisco, Thompson of San Joaquin, Wood of San Mateo, Donovan of Santa Clara and Dermott of Sonoma; Messrs. Lyon and Paolini and Dr. Gardenier of California Physicians' Service; Drs. Marshall Porter of the State Department of Mental Hygiene and John Keye of the State Department of Social Welfare; Drs. John Walsh, Clark Abbott, James Yant, Justin J. Stein, Werner Hoyt, Francis E. West, Dean Hoskins, Malcolm Merrill of the State Department of Public Health, Lewis A. Alesen and J. Lafe Ludwig.

1. *Minutes for Approval:*

On motion duly made and seconded, minutes of the 452nd meeting of the Council, held September 19, 1959, were approved.

2. *Membership:*

(a) A report of membership as of October 28, 1959, was presented and ordered filed.

(b) On motion duly made and seconded, 25 delinquent members whose dues had been paid were voted reinstatement.

(c) On motion duly made and seconded in each instance, four applicants were elected to Retired Membership. These were: Charles E. Taylor, Sherman Tuttle, San Francisco County; Olin M. Holmes, San Mateo County, and Richard B. McGovney, Santa Barbara County.

(d) On motion duly made and seconded in each instance, 18 applicants were elected to Associate Membership. These were: David H. Blankenhorn, Emily H. Gates, Emmett D. Hightower, John V. Kelly, Robert G. Kinsman, Charles R. Kleeman, Harrison Latta, Harry C. Pappas, R. W. Pelatowski, John H. Simonton, Edward J. Stainbrook, Homer O. Stilson, Uwamie Tomiyasu, Claribel Westermeyer, Albert E. Shite, Dean V. Wiseley, Los Angeles County; O. Charles Baumgarten, San Diego County, and Elizabeth Galbraith, San Francisco County.

(e) On motion duly made and seconded, reductions of dues were voted for ten members for reasons of prolonged illness or postgraduate study.

3. *Committee on Private Practice of Medicine in Medical Schools:*

A progress report on conferences with officials of Stanford Medical School was presented and, on motion duly made and seconded, voted acceptance. It was agreed that a report be made by the committee to the House of Delegates.

4. *Commendation to Members:*

By acclaim the Council expressed its commendation to Dr. John W. Cline, new President-Elect, and Dr. David A. Wood, new member of the executive committee of the American Cancer Society, and Dr. Malcolm Merrill, newly elected President of the American Public Health Association.

5. *Bureau of Research and Planning:*

Dr. Francis E. West, chairman, reported the establishment of a technical library in the Association offices.

The bureau recommended that C.M.A. staff members and members of the Medical Executives Conference study all methods of communication. On motion duly made and seconded, this proposal was approved.

Dr. West also reported on the necessity of authorizing California Physicians' Service to participate in the forthcoming program of prepaid medical cost insurance for federal employees. Discussion brought out the necessity of such participation being on a statewide basis utilizing the Relative Value Studies at an acceptable coefficient. Means available to Councilors in disseminating information on this program to their constituents were discussed; on motion duly made and seconded, it was voted that each Councilor determine his own methods for informing his constituents on the program and that the President of the Association send an explanatory letter on the program to all members.

6. *Commission on Professional Welfare:*

Chairman Kirchner reported on a meeting held with representatives of the California Hospital Association on problems of mutual interest. One item of discussion related to instrument and needle counts during surgery and precautions which might be followed.

7. *Committee on Fees:*

Dr. Dean Hoskins, chairman of the Committee on Fees, reported that two county societies had asked authority to review the tabulated IBM runs for the Relative Value Study and asked permission to make these figures available to county societies on request. On motion duly made and seconded, it was voted to commend the committee for its work and to authorize the review, under committee supervision, of tabulated IBM runs by county societies for their own areas.

8. *Report of the President:*

President Reynolds, reporting for the Committee for Emergency Action, stated that the committee had approved a proposal that the chairman of the Committee on Fees be allowed a per diem of $100 in lieu of expenses when called from his office at the request of county societies. On motion duly made and seconded, with the approval of the Finance Committee as required, it was voted to approve this recommendation.

Dr. Reynolds also reported on a request received from the Governor of California for the appointment of the President and President-Elect of the Association as members of a Citizens' Advisory Committee on the health needs of the people. On motion duly made and seconded, it was voted to approve this request.

Dr. Reynolds also suggested the possibility of scheduling Council meetings in areas where problems which might have statewide implications had arisen.

9. *State Department of Public Health:*

Dr. Malcolm Merrill, State Director of Public Health, reported on several items: (1) The department is working with radiologists and others on problems of radiation covered by new state laws; (2) progress is being made on appointment of members of the Cancer Council required under new state laws; (3) the department is developing procedures for local application for sanitation among migratory farm workers; (4) standards for air pollution determination will be announced November 1; (5) study is being given to sanitation measures in the packing of crops in the field rather than in packing sheds.

10. *Annual Session Exhibit Space:*

Dr. Lewis A. Alesen requested approval of an application by the Association of American Physicians and Surgeons to rent exhibit space at the 1960 Annual Session. On motion duly made and seconded, it was voted to approve this application, subject to the availability of such space.

11. *Committee on Social Security Poll Format:*

Speaker Doyle submitted the report of the committee and the proposed educational material for the format of the question. Discussion followed and on motion duly made and seconded it was voted to refer the report and format back to the committee with the recommendation that it be given to the House of Delegates.

12. *Tenure of Special Committees:*

Mr. Hassard pointed out that special committees, under the terms of the By-laws, have a tenure only until the next Annual Session. It was agreed that consideration be given to this requirement at the time of the Council's organization meeting immediately following each Annual Session.

13. *California Medicine:*

Editor Wilbur reported that additional consultation is indicated in the case of statistical material used in CALIFORNIA MEDICINE and requested that Frederick J. Moore, M.D., and Jacob Yerushalmy, Ph.D., be appointed as consultants to the Editorial Board. On motion duly made and seconded, these appointments were approved.

14. *Finance Committee:*

Chairman Heron presented a monthly financial report, which was ordered filed. He also reported that approval had been voted to the proposal for $100 per diem for a committee chairman (Item No. 8).

Mr. Hunton reported on arrangements made for bank loans and stated that the independent auditors would soon complete their recommendations for improved financial procedures. The Finance Committee will report back to the Council on such recommendations.

15. *California Physicians' Service:*

Dr. Heron reported that California Physicians' Service is currently operating on a satisfactory financial basis.

Dr. Reynolds urged that a new period of enrollment for the "MD-65" program of C.P.S. be authorized prior to the end of the year and, on motion duly made and seconded, authorization was voted for the C.P.S. board of Trustees to hold an additional enrollment period.

16. *Commission on Medical Services:*

A report of current activities of the Commission and its committees was received.

On motion duly made and seconded, it was voted to approve the commission's suggestion of more frequent meetings with insurance representatives on matters of mutual interest.

On motion duly made and seconded, it was voted to request the Commission on Medical Services to prepare a program for the use of county societies in meeting medical care problems associated with the older age groups.

Dr. MacLaggan reported on a meeting of the Joint Council to Improve the Health Care of the Aged, at which plans were discussed for the inventorying of resources available to older age groups. The group has established a budget of $1,500, of which $375 will be contributed from the Commission's funds as the Association's share.

17. *Governor's Traffic Safety Conference:*

Dr. MacLaggan presented a report by Dr. Chester K. Barta on the Governor's Traffic Safety Conference and Councilor Teall, chairman of the medical division of the conference, also reported on the findings of the delegates. On motion duly made and seconded, it was voted to establish a standing Committee on Traffic Safety under the Commission on Community Health Services.

18. *C.M.A. Scientific and Postgraduate Educational Activities:*

Dr. Wilbur, chairman of an ad hoc committee to review all scientific and professional education activities of the Association, presented his nominations for members of this committee. On motion duly made and seconded, these nominees were confirmed: Dr. Wilbur as chairman; Drs. J. B. deC. M. Saunders, Clayton Loosli, Lowell Rantz, William P. Longmire, Jr., George E. Norwood, Joseph Telford, Donald Charnock and Werner Hoyt.

19. *Staff Report:*

Mr. Hassard reported that 23 county societies have so far approved the use by the Association with the State Government of the coefficients developed in their areas under the Relative Value Study resurvey and that no societies have declined this procedure.

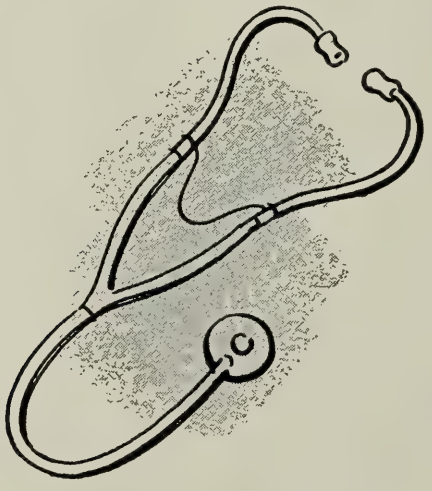
20. *Legal Department:*

Mr. Hassard reported that a District Court of Appeal had ruled adversely on a suit involving admission of an applicant physician to the staff of a district hospital and that an appeal would be taken to the Supreme Court of California.

Adjournment:

There being no further business to come before it, the meeting was adjourned at 5:10 p.m.

SAMUEL R. SHERMAN, M.D., *Vice-Chairman*
MATTHEW N. HOSMER, M.D., *Secretary*



3 POSTGRADUATE COURSES

During

C.M.A. ANNUAL SESSION

February 21 to 23, 1960 • Los Angeles

THE CALIFORNIA MEDICAL ASSOCIATION *in cooperation with the Medical Schools of* UNIVERSITY OF CALIFORNIA, LOS ANGELES, UNIVERSITY OF SOUTHERN CALIFORNIA *and* COLLEGE OF MEDICAL EVANGELISTS, *will present three Postgraduate Courses during the Annual Session in February. These courses will be clinically oriented and will include case presentations and closed circuit television.*

Choose the course which most interests you, follow the course, and the 1960 session will send you back to your practice stimulated and refreshed.

Look for the program giving complete details which will arrive in your office in January.

• By UNIVERSITY OF CALIFORNIA SCHOOL OF MEDICINE, LOS ANGELES:

INFECTIOUS DISEASES—9 hours

Time: Sunday, Monday and Tuesday, February 21, 22 and 23, 1960—9:00 a.m. to 12:00 noon.

Place: February 21 at Chapman Park Hotel, February 22 and 23 at Ambassador Hotel, Los Angeles.

• By UNIVERSITY OF SOUTHERN CALIFORNIA:

CLINICAL ENDOCRINOLOGY—9 hours

Time: Sunday, Monday and Tuesday, February 21, 22 and 23, 1960—9:00 a.m. to 12:00 noon.

Place: February 21 at Los Angeles County Hospital, February 22 and 23 at Ambassador Hotel, Los Angeles.

• By COLLEGE OF MEDICAL EVANGELISTS:

MINOR SURGERY IN THE OFFICE—9 hours

Time: Sunday, Monday and Tuesday, February 21, 22 and 23, 1960—9:00 a.m. to 12:00 noon.

Place: White Memorial Hospital, Los Angeles.

***Tuition Fee:* $25.00 for each course**

APPLICATION FOR ENROLLMENT

Mail to: POSTGRADUATE ACTIVITIES, CALIFORNIA MEDICAL ASSOCIATION
2975 Wilshire Boulevard, Los Angeles 5, California

With check or money order in the amount of $25.00 made payable to CALIFORNIA MEDICAL ASSOCIATION

Name_____

Address_____

I am in General Practice_____ I limit my practice to_____

Medical School Attended_____ Year of Graduation_____

Please enroll me in the course indicated by ✓.

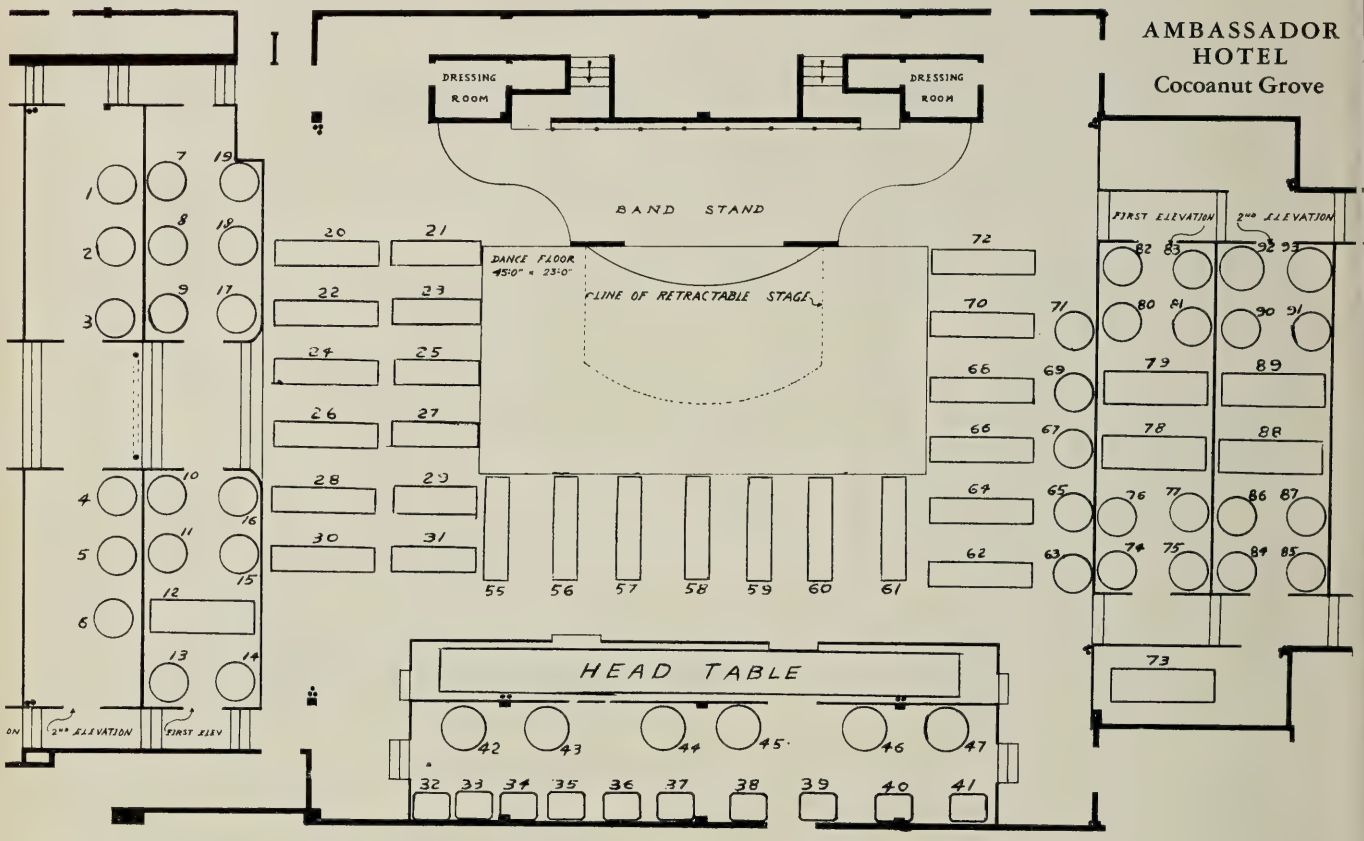
☐ 1. **Minor Surgery in the Office** (9-hour course, Sunday, Monday and Tuesday mornings)

☐ 2. **Infectious Diseases** (9-hour course, Sunday, Monday and Tuesday mornings)

☐ 3. **Clinical Endocrinology** (9-hour course, Sunday, Monday and Tuesday mornings)

COME to the...

ANNUAL SESSION



Choose the location of your table from the floor plan above. The corresponding table number below gives the number of seats at each table. Please fill out coupon on opposite page.

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GO to the...

Presidents' Dinner-Dance

SUNDAY, FEBRUARY 21, 8 p.m.

Cocoanut Grove

Entertainment: LENA HORNE

Music for Dancing: DICK LA SALLE

Food: Prime Rib Dinner

Cost: $12.50 per person including tax, tip and cover

TICKETS ARE NOW ON SALE—USE COUPON BELOW

Your tickets will be held for you at the door. A receipt for your check will be sent to you. Please present this receipt at the door for your ticket, Sunday night.

OR

Tickets may be picked up at any time Sunday morning or afternoon, February 21, at ticket booth, Woman's Auxiliary registration desk. Requests for tables for large parties should be sent in one envelope and early.

MISS LOUISE KALINICH
Los Angeles County Medical Association
1925 Wilshire Boulevard
Los Angeles 57, California

Enclosed is my check for $_____. Please send me_____ticket(s) to the PRESIDENTS' DINNER-DANCE, Sunday, February 21, 1960.

Table Choice_____ _____ _____ —or assign next best available_____
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Name_____

Address_____

(Make checks payable to the California Medical Association)

10th ANNIVERSARY

POSTGRADUATE INSTITUTE

WEST COAST COUNTIES

Presented by Committee on Postgraduate Activities of the California Medical Association, in cooperation with Monterey, Santa Cruz and San Benito County Medical Societies, and the University of California, San Francisco, Seymour M. Farber, M.D., Assistant Dean for Continuing Medical Education.

Del Monte Lodge, Pebble Beach

February 4 and 5

PROGRAM

THURSDAY, FEBRUARY 4

Morning Session

Drugs and the Mind

9:30-10:05—**Sedatives, Tranquillizers and Psychic Energizers**—Robert M. Featherstone, Ph.D.

10:05-10:40—**Psychopharmacologic Therapy in Emotional Disease**—Enoch Callaway III, M.D.

10:55-11:30—**Psychopharmacologic Therapy in Systemic Disease**—Robert H. Crede, M.D.

11:30-12:30—**Panel: The Potential Scope of Drugs Acting on the Mind.**

Afternoon Session

Recent Advances in Gastroenterology

2:00-2:35—**Our Newer Knowledge of Liver Disease**—John V. Carbone, M.D.

2:35-3:10—**Intestinal Malabsorption**—Theodore L. Althausen, M.D.

3:25-4:00—**The Changing Field of Gastrointestinal Surgery**—Leon Goldman, M.D.

4:00-5:00—**Panel: New Trends in Therapy.**

7:30 p.m.—**Dinner**—Speaker: Dwight L. Wilbur, M.D.

FRIDAY, FEBRUARY 5

Morning Session

Infection, Immunity and Hypersensitivity

9:30-10:05—**The Changing Pattern of Infectious Disease**—Moses Grossman, M.D.

10:05-10:40—**The Allergic Child**—William C. Deamer, M.D.

10:55-11:30—**The Antibiotics Jungle**—Ernest Jawetz, M.D.

11:30-12:30—**Panel: Management of Bacterial Infections.**

Afternoon Session

Pulmonary Disease

2:00-2:35—**Pneumonitis: An "Inflammatory" Diagnosis**—Alvin S. Hambly, M.D.

2:35-3:10—**Asthma and Emphysema**—Seymour M. Farber, M.D.

3:25-4:00—**Chest Surgery in Perspective**—Orville F. Grimes, M.D.

4:00-5:00—**Panel: Our Newer Approaches to Therapy in Chest Disease.**

HOST: Monterey County Medical Society . . . **REGIONAL CHAIRMAN:** Robert A. Helfrich, M.D., 440 E. Romie Lane, Salinas, California . . . **INSTITUTE FEE:** $15.00. For additional information, contact Postgraduate Activities Office, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5. **All California Medical Association members and their families are cordially invited to attend.**

Recent Trends in Professional Liability Cases

DURING THE PAST YEAR in one metropolitan county, eighteen malpractice cases were won, six were lost, three are awaiting a new trial and nine were settled. The losses totalled $238,300. Reports from lawyers who tried the cases, and from jurors who heard them, reveal factors which may influence a jury.

¶ Many jurors have great respect for well-trained and devoted physicians.

¶ Jurors consider themselves and most of their fellow men to be honest and expect others to be.

¶ Well-kept, written records are impressive.

¶ Honest mistakes, when admitted, can be excused, but attempts to hide or cover up or change records without explanation arouse distrust.

¶ Jurors take their duties seriously and feel that they should be trusted and have things explained to them in language they can understand.

¶ Indications that a physician is sympathetic and considerate with his patients weighs heavily in his favor.

A review of the facts developed in some of the cases that were decided may serve to illustrate precautions to be taken on things to be avoided.

Malpractice Insurance Contracts

During the past year, the members of a hospital medical staff in California were sued by a physician whose surgical privileges had been revoked. The plaintiff physician alleged that he had been slandered and libeled by the reasons given by the staff members for their refusal to renew his privileges. The plaintiff was not successful in his action. This case raised some practical questions regarding whose responsibility it is to defend and indemnify staff physicians for their acts in that capacity. Those physicians who are serving on hospital staff committees should assure themselves that their malpractice insurance carrier or the hospital carrier or the basic policy of the hospital will provide for the defense of their official acts and decisions as members of that committee.

Physicians who hold public office such as the office of coroner should assure themselves that their malpractice insurance contract provides for their defense and indemnification while acting both as a private physician and as a public officer. A case in Missouri held that the physician's malpractice policy did not cover him for liability arising out of his medical actions as a coroner.

From the Medical Review and Advisory Board, California Medical Association.

Injuries from Drugs and Other Therapy

The side effects occurring as a result of the taking of prescribed drugs, of diagnostic procedures, or of x-ray and other kinds of therapy are sometimes harmful. Physicians may be held responsible for injuries that might be expected and avoided which are caused by drugs or by treatment.

A $56,000 verdict was returned against a physician who treated a 48-year-old patient with mycifardin (neomycin), with the result that he became afflicted with deafness and tinnitus. There were indications that the plaintiff had intrinsic renal disease. In such cases, it was alleged, medical literature indicates that this antibiotic should be used only in extreme emergency. At the trial, the defendant physician conceded that this case was not an emergency. The question of whether the physician exercised reasonable care under the circumstances was submitted to the jury.

In general, the use of drugs or procedures which might produce harmful side effects should not be prescribed lightly—only when medically necessary. Statements indicating that certain drugs or procedures are perfectly safe may be construed to be a warranty of safe treatment. That should be avoided.

In the poliomyelitis cases against Cutter Laboratories, a manufacturer of drugs and medicines, the trial court assumed that there had been a sale of the vaccine and that it was subject to the implied warranties imposed on some products by the Uniform Sales Act. On appeal, Cutter Laboratories plus several amici curiae (friends of the court) are contending that the use of biologicals by a physician is a professional service, not a sale, and that neither the manufacturer nor the physician is a "warranter of cures."

Failure to Follow Up

Abandonment and failure to follow up continue to be the basis of some malpractice claims and suits. Personal pique is often the underlying cause for some cases of abandonment. The rule for physicians: Be angered, but don't hang up!

If a physician records a note that a person should have follow-up x-ray or laboratory work for a suspected fracture, tuberculosis, or for any other reason —he should establish some means to remind himself or the patient to do the follow-up. Bad results which occur when there was no follow-up after one had been noted as proper, have been embarrassing. If the patient is not aware of your note that a follow-up is needed, the physician is in an unhappy position.

Foreign Bodies

The incidents in which a foreign body is left in a

wound seem to be decreasing. The U. S. Court of Appeals for the District of Columbia in December, 1958, held "that everybody knows without being told by an expert that it is not approved surgical practice to leave a small pad of gauze or a few threads therefrom or any other foreign nonabsorbable substance in a patient's body."

A Canadian physician recently reported in Scotland to a joint meeting of the Canadian and British Medical Associations as follows:

"In the last six years in Canada alone surgeons had left 19 needles, 35 sponges, five pairs of forceps and 17 miscellaneous objects in the bodies of patients during operations.

"The layman finds it hard to understand how forceps could be left behind inside a body, but there are several operations where the stomach is packed full of instruments."

Careless Comments

Careless or thoughtless comments by a physician to a patient or relative may be introduced in evidence for the jury to consider in their deliberations to determine that the degree of care used was that standard of care ordinarily exercised by other doctors of good standing in that community. Such comments as "this was not my day" or "I goofed" or "I should have stayed in bed" can be considered along with other evidence in determining whether or not proper standard of care was administered.

Freedom from "Mental Disturbance"

Freedom from mental disturbance is a personal interest that is protected by the law. A New York appellate court in 1958, considered a case in which a patient went to a radiologist for x-ray treatments of bursitis in her right shoulder and received x-ray burns in the course of therapy administered by the defendant physician. She was informed by a dermatologist that she should have the tissue examined every six months since cancer might possibly develop. It was alleged that as a result of the statement, she developed severe cancerophobia. She was entitled to recover for mental anguish resulting therefrom, according to the court. The facts showed that after seven x-ray treatments, the skin blistered, became raw and scabs formed which lasted from several months to several years. The action was brought on the grounds of improper and excessive x-ray treatments. There was medical testimony both pro and con. In proof of damages, the testimony of a neuropsychiatrist was introduced to the effect that the plaintiff was suffering from a severe cancerophobia and might have permanent symptoms of anxiety. An award of $25,000 was made by the jury, $15,000 of which was based on the mental anguish flowing from the cancerophobia. In examining this decision, the appellate court held that freedom from mental disturbance is a protected interest. This mental anguish arose as a result of the injury inflicted by the defendants. The answer to the question how far this doctrine will extend or at what point one ceases to be responsible for mental anguish, the court said, must be "dictated by public policy or common sense."

The tendency to sue physicians for liability based on other than negligent acts continues. In such cases, it is not always necessary for the plaintiff to produce a medical expert to establish the prevailing medical standard of care.

Breach of Contract

It was found that a physician agreed to remove some blemishes from one of his patients. The treatment failed to accomplish its purpose. The patient sued for breach of contract and was successful with his claim. Even though the physician denied that he made any contract to cure, the jury awarded a $4,000 verdict. On appeal, the case was reversed and a new trial ordered. During the second trial, the case was settled for $1,250. The physician's malpractice insurance carrier denied liability under its contract and the physician sued the company. The court held that the policy only insured against "malpractice error or mistake" and not against damages arising out of breach of contract.

In another case decided in March of 1957, suit was brought for breach of contract. The jury had to decide whether the parties had agreed that a cesarean section was to be performed at the time of delivery. The jury also had to decide whether or not the damages which the plaintiff received were the result of the failure to perform cesarean section. The plaintiff had a history of two previous stillborns and had insisted that she be delivered on this occasion by cesarean section. The physician did not use the operation and the baby was stillborn. In an action for breach of contract, the jury returned a verdict for $5,000, which included recovery for grief and suffering. On appeal, the court held that, under the modern view, where a contract deals with personal rights and emotions, such as it does in the breach of contract to marry and in the breach of a contract such as in this case, damages may be awarded for grief.

Assault and Battery

Cases continue to arise in which it is alleged that the surgeon performed an operation which was not authorized. In a California case that was reviewed by the appellate court, the plaintiff alleged that without "her knowledge and consent" the defendant operated on her in an "unnecessary, careless and negligent manner." Both lack of consent and neg-

ligence were relied upon in this case. The court held that it was a case involving technical battery. A verdict of $75,000 was affirmed. The plaintiff was operated on for prolapse of the uterus, for a rectocele and a cystocele. The surgeon removed the uterus, the Fallopian tubes, and her one remaining ovary. To such excisions, the plaintiff did not consent. Hospital records showed that pathological examination of the tissues revealed them to be normal. There was evidence from which the jury could conclude that it is not accepted surgical practice to remove such organs when there are no pathological abnormalities.

Dr. Leo J. Adelstein of Los Angeles has pointed out* that if the physician agrees to take over the treatment and observation of a patient, an express or implied contract is entered into. A written contract is seldom, if ever, used when furnishing most medical services. However, when delicate, complicated and hazardous procedures are to be used, it is recommended that a written consent or memorandum be obtained. It has been held that the contract relationship between a physician and patient imposes a duty on the physician to use the highest degree of good faith in dealing with his patient. This includes the duty to make a full disclosure of the surgical risk, hazard and danger, if any, in order that the patient may make an enlightened consent to the operation or procedure. Technical language should be avoided unless it is quite well understood.

Howard Hassard, the general counsel of the California Medical Association, has stated:

"Some physicians have a tendency to poke fun at the concept of pre-enlightenment of the patient on the ground that if you undertake to tell some of the story you must tell it all, and that if you explain all conceivable consequences of any course of action, you either devote an afternoon to the project or scare the patient to death, or both. While the validity of the point is recognized, the fact remains that the public today will not accept secrecy or mysticism and will get its information where it can, and if the information is inadequate, will draw erroneous conclusions. It seems to me that it is possible in medicine to reach a technique in which adequate explanation is given without going to extremes and without impairing the patient's confidence."

*Los Angeles County Medical Association *Bulletin*, July 4, 1957.

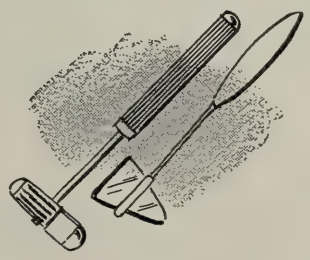
Tape Recordings

Some physicians have reported that offhand preliminary comments made by them have been recorded without their knowledge. When disputes develop about treatment or a lawsuit develops to recover damages for an injury, a physician should be most circumspect about what he says. If proper questions should be answered, the physician may suggest that they be put in writing or that he will consult his records to refresh his recollection. He ought not be too quick to give an opinion. It is wise to say, "I don't recall offhand, but I will find out."

Miscellaneous Costly Reminders

Current malpractice case records reveal several instances in which pelvic and abdominal operations on women disclosed an undiagnosed pregnancy or during which there occurred a perforation of the colon, or femoral nerve paralysis, or severing of the common bile duct and, in one instance, vesicovaginal fistula. These cases have cost $18,750, $25,000, $2,000, $5,000 and $15,000.

Also reported during the year, was an instance of vein stripping being performed on the wrong leg and the removal of a short arm cast in such a manner that permanent, unsightly scars were left on the patient's arm and hand.



In Memoriam

BLOCH, JESSE LEROY. Died in San Pedro, November 15, 1959, aged 65 of cancer. Graduate of University of Oregon Medical School, Portland, 1919. Licensed in California in 1924. Doctor Bloch was a member of the Los Angeles County Medical Association.

✤

BRAMKAMP, ALLAN LEWIS. Died in Banning, November 14, 1959, aged 86. Graduate of Medical College of Ohio, Cincinnati, 1899. Licensed in California in 1919. Doctor Bramkamp was a retired member of the Riverside County Medical Association and the California Medical Association, and an associate member of the American Medical Association.

✤

CLARK, GORDON HAY. Died in Beirut, Lebanon, November 22, 1959, aged 48, in an airplane crash. Graduate of Hahnemann Medical College and Hospital of Philadelphia, Pennsylvania, 1949. Licensed in California in 1950. Doctor Clark was a member of the San Francisco Medical Society.

✤

COSTOLOW, WILLIAM EVERT. Died in Los Angeles, November 22, 1959, aged 66. Graduate of University of Pennsylvania School of Medicine, Philadelphia, 1916. Licensed in California in 1921. Doctor Costolow was a member of the Los Angeles County Medical Association.

✤

CURTIS, CHARLES GLENN (C. GLENN).* Died in Long Beach, November 15, 1959, aged 65, of myocardial infarction. Graduate of College of Medical Evangelists, Loma Linda-Los Angeles, 1924. Licensed in California in 1924. Doctor Curtis was a member of the Orange County Medical Association.

✤

GHRIST, DAVID MARTIN. Died November 14, 1959, aged 94. Graduate of Keokuk Medical College, Iowa, 1898. Licensed in California in 1923. Doctor Ghrist was a retired member of the Los Angeles County Medical Association and the California Medical Association and an associate member of the American Medical Association.

✤

GIBBONS, JOEL MARION. Died November 16, 1959, aged 48, in an airplane crash. Graduate of College of Medical Evangelists, Loma Linda-Los Angeles, 1936. Licensed in California in 1936. Doctor Gibbons was a member of the Los Angeles County Medical Association.

LEWIS, WILLIAM B. Died in Oakland, November 28, 1959 aged 73. Graduate of the University of Colorado School of Medicine, 1912. Licensed in California in 1943. Doctor Lewis was a member of the Solano County Medical Society.

✤

MCGUIRE, JOHN J. Died in San Francisco, October 26, 1959, aged 67, of heart disease. Graduate of St. Louis University School of Medicine, Missouri, 1925. Licensed in California in 1926. Doctor McGuire was a member of the San Francisco Medical Society.

✤

NELSON, H. MILFORD. Died in Santa Cruz, November 24, 1959, aged 53. Graduate of the College of Medical Evangelists, Loma Linda-Los Angeles, 1932. Licensed in California in 1932. Doctor Nelson was a member of the Santa Cruz County Medical Society.

✤

OAKLEY, ENOCH REED (E. REED). Died August 20, 1959, aged 60. Graduate of University of Nebraska College of Medicine, Omaha, 1932. Licensed in California in 1937. Doctor Oakley was a member of the Los Angeles County Medical Association.

✤

RANEY, RUPERT B. Died November 28, 1959, aged 59, of heart disease. Graduate of Creighton University School of Medicine, Omaha, Nebraska, 1927. Licensed in California in 1928. Doctor Raney was a member of the Los Angeles County Medical Association.

✤

ROMONEK, PHILIP L. Died in Los Angeles, November 9, 1959, aged 64. Graduate of Stritch School of Medicine of Loyola University, Chicago, Illinois, 1921. Licensed in California in 1942. Doctor Romonek was a member of the Los Angeles County Medical Association.

✤

SCHWARTZ, FREDERICK LEONHARDT. Died in San Diego, November 13, 1959, aged 62. Graduate of University of Buffalo School of Medicine, N. Y., 1917. Licensed in California in 1924. Doctor Schwartz was a member of the San Diego County Medical Society.

✤

SWAN, ALFRED HJALMAR. Died in Pearblossom, November 3, 1959, aged 76. Graduate of Rush Medical College, Chicago, Illinois, 1921. Licensed in California in 1930. Doctor Swan was a member of the Los Angeles County Medical Association.

*THE FOLLOWING LETTER from Richard Nixon, Vice-President of the United States, was received by William F. Quinn, M.D., President of the Los Angeles County Medical Association.

Dear Bill: December 11, 1959

As you can understand, I was deeply saddened by the news of Doctor Glenn Curtis' passing. There could have been no greater credit to your profession than was "Doc" Curtis, who so diligently and patiently applied his many fine qualities to the service of all who were fortunate enough to call on him. I know that you feel privileged, as I do, to have had "Doc" as your friend, and it is gratifying to know that he had so many admirers who were able to profit from their association with his high character.

Sincerely, RICHARD NIXON

PUBLIC HEALTH REPORT

MALCOLM H. MERRILL, *M.D., M.P.H.*
Director, State Department of Public Health

A NEUROSURGEON has reported to the Los Angeles County Health Department nine cases of an illness characterized by an upper respiratory tract illness, followed by serious neurologic symptoms. The respiratory tract symptoms were variously described by the patients as "flu," cold, or sore throat. One patient had diarrhea and chills before the onset of neurologic symptoms. In the households of four of these patients, others were also ill with respiratory diseases. Neurologic symptoms appeared five to 14 days after the onset of the respiratory symptoms.

The nervous system symptoms were most frequently palsy or paresis, with paresthesias. Involvement of the brachial plexus was noted in six of the nine cases. Two patients had scattered paresis and paresthesia with electrocardiographic abnormalities. Examination of the spinal fluid in these two instances showed no abnormality except elevated total protein on one case. The patients appeared euphoric in relation to their disabling symptoms. All have had clearing of their symptoms varying in time from one to eight weeks.

The patients' ages ranged from 15 to 46 years. Seven were males and two females. All came from a limited geographic area in Los Angeles County. However, as they were all referred to a specialist practicing in that area, the geographic limitation is probably an artificial one.

The department would like information about similar illnesses occurring in the state. The serious and prolonged nature of the symptoms indicates further studies are needed. The Bureau of Acute Communicable Diseases would be ready to assist in an epidemiologic study if indicated. Please send any information you may have to the Bureau of Acute Communicable Diseases, State Health Department, 2151 Berkeley Way, Berkeley.

* * *

With the increased awareness of chronic illness and its disabling effects to people in California, the department has developed a variety of programs to assist those who are in need of restorative services.

Under the Hospital Survey and Construction Act, more than $4,400,000 of state and federal funds has been spent for construction of 13 chronic disease hospitals since 1949 in California. Since 1955, five new rehabilitation centers have been assisted by more than $2,250,000 in state-federal grants. The Bureau of Hospitals, in administering the Hospital Licensing Act, has increasingly emphasized physical rehabilitation for patients in chronic disease hospitals and nursing homes.

The department has allocated funds for several local projects aimed at stimulating local communities in rehabilitation activities. For example, during the past two and a half years, intensive training courses have been given to nurses from many areas of the state at the Fairmont Hospital Rehabilitation Unit in Alameda County.

Also, a home care project with a strong rehabilitation emphasis has been started with local project funds at the Los Angeles County General Hospital. Both of these activities have been highly successful.

The Crippled Children Services in California provided extensive services to persons under the age of 21 with many different types of disabling conditions. In fiscal year 1957-58, over 54,000 children received diagnostic and treatment services under the auspices of this program. Conditions covered include defects of an orthopedic nature, deformities requiring plastic surgery, visual and hearing loss, rheumatic and congenital heart disease, as well as other chronic illnesses.

During the spring of 1959, an extensive survey of chronic disease services and facilities was made in Kern County, and the Kern County Medical Society became extremely interested in the survey and the problems of disabled aged. The recommendations included a provision for establishment of an intensive physical restoration program and disability screening plan as part of the chronic disease services of the county hospital.

Another activity has been cooperation with the Rehabilitation Committee of the California Medical Association. This committee is interested in learning the attitudes and experiences of California physicians with regard to physical rehabilitation. The department has assisted the committee in developing a questionnaire survey of California physicians to be conducted in the next few months. It is expected this will lead to an energetic education and action program by physicians in their communities.

Currently, a method of evaluating the effects of restorative services is being developed by the Bureau of Chronic Diseases and several county hospitals with rehabilitation units. There appears little doubt that with increased awareness of disability by local communities the department's responsibilities in this area will increase.

1960

Annual Session

AMBASSADOR HOTEL • LOS ANGELES
FEBRUARY 21 to 24

- General Scientific Meetings • Postgraduate Courses
 Technical Exhibits • Scientific Exhibits

- Medical Motion Pictures

- Presidents' Dinner Dance
 Sunday, February 21 • Cocoanut Grove

- House of Delegates
 Sunday, February 21 • Wednesday, February 24
 Opening Session, Saturday, 7:30 p.m., February 20

- Registration Daily
 8:30 a.m. to 5:30 p.m. . . . No Registration Fee

WOMAN'S AUXILIARY
TO THE CALIFORNIA MEDICAL ASSOCIATION

IT HAS BEEN my privilege and pleasure to visit thirty-two of the thirty-four organized county auxiliaries in the state. All have shown a deep interest and desire to better serve organized medicine.

All the auxiliaries are keenly aware of the Forand-type legislation and they are eager and willing to assist the county medical societies in alerting the public to the dangers of this type of legislation.

Many letters have been written to the congressmen from the respective districts regarding their stand on the Forand bill. The replies have been the same: "Unless the medical profession has a better plan I will vote in favor of the Forand bill."

The auxiliaries are interested in aiding their respective county medical societies in the program for the care of the aged.

At a recent meeting of the California Medical Association Council the following recommendations pertaining to the Auxiliary were approved.

1. That the Woman's Auxiliary to the C.M.A. be asked to undertake one or more of the following projects:

(*a*) Develop and make available to all physicians in each city a directory of all facilities and services (state, community and private) available to the aged in their respective county.

(*b*) Assume leadership in the development of homemaker services and training programs for nurse aides and others who work in nursing homes.

(*c*) Cooperate with local agencies in development of sheltered workshops, senior centers, et cetera, and in the employment of those 65 or over.

(*d*) Distribute or make available to physicians and the public, information on community services available to the aged.

(*e*) Develop a list of all senior citizen clubs and citizen committees on aging in the state, as well as lists of other community agencies interested in the problems of the aged.

(*f*) Develop nursing aid training programs.

(*g*) Send a monthly copy of *Today's Health* to each senior citizen club in the state.

Through this program the auxiliaries could assist their county medical societies and at the same time render an important service to the community.

Our Auxiliary is grateful to the California Medical Association for the excellent cooperation and for the many favors we receive.

To name a few: The C.M.A. budgeted $4,000 for the printing and distribution of our state publication, *Courier*, this year.

We are receiving $500 to help defray the expense of our convention in February.

All the mimeographing for the work-book distributed at the Fall Conference was done by the C.M.A. office personnel.

MRS. THEODORE A. POSKA
President, Woman's Auxiliary to the California Medical Association

Presidents' Dinner Dance

Sunday, February 21

FOR RESERVATIONS, SEE PAGES 54 AND 55

INFORMATION

Income Taxes

Deductibility of Entertainment Expenses

HOWARD HASSARD, San Francisco
Peart, Baraty & Hassard
General Counsel, California Medical Association

FROM announcements and rulings in recent weeks, it appears that your next income tax return is going to get the closest scrutiny ever by the Internal Revenue Service. Entertainment expenses will get a particularly close checkup in line with the established policy of the tax authorities to scrutinize expense accounts in auditing income tax returns for abuses in claims for deductions for entertainment and other business expenses. In a recent special ruling, the Internal Revenue Service laid down a set of criteria for the deduction of entertainment expenses by physicians which will be useful to guide physicians who are planning to take deductions for business entertainment.

Generally speaking (and quite apart from the special ruling applicable to physicians) entertainment expenses are deductible if they are ordinary and necessary expenses incurred in the operation of a business regularly carried on by the taxpayer. To be deductible as business expenses, entertainment expenses must have a proximate relation to the taxpayer's trade or business and be of a character reasonably expected to benefit that trade or business. A physician thus may deduct on his income tax return the costs of entertainment, provided he can establish to the satisfaction of the Internal Revenue Service that such expenses are ordinary and necessary business expenses and clearly related to the production of business income.

The previously mentioned special ruling* specifically discusses the problem of deductibility of entertainment expenses by physicians and sets out a check list for determination of deductibility. According to its provisions the deduction for costs of entertainment may be claimed when the physician is able to show that the entertainment had a direct relationship to the conduct of his practice, and can show the business benefit reasonably to be expected from the expenditure. The general statement that he hoped or expected to get referrals or patients as a result of the entertainment is not enough, and if personal reasons predominate, the expenditure may not be deducted, even though there is some possibility of a business benefit.

*Special Ruling, CCH, Sec. 6575.

The ruling distinguishes between the entertainment of other physicians and the entertainment of persons who are not physicians, stating: "Except in the case of industrial physicians, entertainment of individuals who are not doctors will not ordinarily qualify because the possibility of benefits to be expected are so remote as to be negligible." Thus, except for an industrial physician, whose clientele differs considerably from that of the specialist or the physician in general practice, the deduction for entertainment expenses would seem to be limited to amounts spent in entertaining other physicians who might refer patients. Nevertheless, in instances of the entertainment of patients, it is clear that the same general rules apply as in the entertainment of other physicians and the clear relationship of the expenditure to reasonably expected income must be shown.

Criteria to be used in establishing the deductibility of entertainment expenses, according to the ruling, include the following:

"*a.* Specific purpose of the entertainment.

"*b.* Nature of the practice of the doctor incurring the expenditure.

"*c.* Period of time the doctor has been in practice and the number of patients he already has.

"*d.* Percentage of his patients received as referrals.

"*e.* Names of individuals entertained and reason why additional income could reasonably be expected from each.

"*f.* Whether or not referrals were actually received from the doctors entertained and any indication of the effect of the entertainment on these referrals.

"*g.* Number of times individual doctors were entertained during the year, inasmuch as repeated entertainment indicates a personal motive.

"*h.* Whether or not other doctors in the same type practice in the locality have entertainment expenses."

Although the policy of the Internal Revenue Service on deductibility of entertainment expenses is a strict one, there is no reason why members of the medical profession are not to be allowed deductions for business entertainment, just as other professionals are, so long as there is a direct relationship between the expense and the development or expansion of a medical practice. But it must be kept in mind that the mere hope of referred patients is not enough to justify a deduction—there must be a definite possibility, or reasonable expectation, that medical fees will result from the entertaining.

Assuming an entertainment expense is deductible, the amount of the deduction must be carefully considered. Under the current tax law, it seems that

amounts spent by an individual in entertaining customers or clients will rarely be deductible in full because a portion of the expense is usually attributable to the taxpayer or his family. The Tax Court unanimously held that only the portion of the entertainment outlay which is shown to be different from or in excess of the amount you would ordinarily spend on yourself or your family is deductible.† For example, let us assume you entertain another physician for lunch, and the tab is $10.00, or about $5.00 for each of you. Assuming a deduction can be claimed, how much can you deduct? This will depend upon what you ordinarily spend for your own lunch. Assuming that you ordinarily spend about $2.00 for lunch, you would probably be entitled to deduct up to $8.00 under the tax rules. Thus, the taxpayer must not only show that the entertainment expenditure is deductible as a business expense, but must show how much of his share of the expenditure exceeds any nondeductible personal expenditure.

To complete the entertainment expense picture, it must be noted that the importance of keeping appropriate records of business expenses cannot be overemphasized. In many cases, deductions for entertainment expenses have been disallowed because the taxpayer could not sustain his claim by more than a loose estimate. Whenever a revenue agent questions whether or not an expense claimed as a deduction was actually incurred, the burden of proof is on the taxpayer. The Internal Revenue Service is not required to prove that the taxpayer did not incur the claimed expense. The taxpayer must therefore not only use caution in claiming deductions for entertainment expenses, but must insure that any deduction taken can be justified by adequate records.

†Richard A. Sutter, 21 T.C. 170; J. W. Scott, 15 T.C.M. 1431.

Blue Shield Medical Care Coverage for the Aged

THE NATIONWIDE Blue Shield Plans and their sponsoring medical societies have registered outstanding progress in implementing the American Medical Association resolution—passed a year ago calling for the development of medical care coverage for the aged by voluntary means, John W. Castellucci, executive vice-president of the National Association of Blue Shield Plans said in Chicago recently.

"We have just completed a special survey in order to determine the progress made by Blue Shield Plans since the passage of the A.M.A. resolution in December 1958, and the results are most encouraging," Mr. Castellucci reported.

"Only eight of the 67 Blue Shield plans located in the United States, with only two per cent of total Blue Shield membership, have no programs for senior citizens in the works at the present time," he noted.

Mr. Castellucci said that the remaining 59 plans either have special aged programs already being offered in their areas, or have programs in various stages of development.

Specifically, the study conducted by the national Blue Shield association showed that 32 of the plans, representing more than 50 per cent of total enrollment, have made available nongroup programs for persons over the age of 65. Three plans, with about 15 per cent of total Blue Shield membership, have programs already approved and ready to be offered as soon as the mechanics of administration are completed. Also, 23 additional plans, covering 30 per cent of total enrollment, have senior citizen programs in various stages of development and these plans report that they expect their programs to be in force early in 1960.

Thus, about 98 per cent of the total United States Blue Shield enrollment is in areas where special aged programs are already being offered or are in stages of development, all within a year after passage of the A.M.A. resolution.

Mr. Castellucci indicated that in the development of programs for senior citizens, the plans have followed three general lines of approach: (1) Developed new programs designed specifically for persons over 65; (2) effected modifications in existing programs to accommodate enrollees over 65; (3) eliminated age limits on existing nongroup programs offered to the general public who are not eligible to join through their place of employment.

Before the passage of the A.M.A. resolution, the national Blue Shield organization noted, only a limited number of plans had special programs for the aged, although all plans traditionally imposed no age limit on group enrollment and permitted continuation of Blue Shield coverage to all members who had acquired it prior to reaching 65.

"While it is realized that the many and varied problems confronting our senior citizens cannot readily be solved in a short period of time, it is heartwarming to note the significant progress made by Blue Shield plans throughout the country in the past year in developing programs to meet the special medical needs of persons over 65. In offering these programs, Blue Shield, of course, is fully cognizant of the splendid cooperation offered by sponsoring medical societies without whose efforts such significant progress could not have possibly been recorded in 12 short months," Mr. Castellucci said.

NEWS & NOTES

NATIONAL • STATE • COUNTY

KERN

Dr. William H. Moore, Jr., son of a former president of the Kern County Medical Society, was himself elected president at the society's annual business meeting in December. He succeeds Dr. Robert L. Day. Other officers include Dr. Carrol W. Goss, vice-president, and Dr. Harold Freedman, secretary-treasurer.

LOS ANGELES

Dr. Joseph P. O'Connor, of Pasadena, has been elected president of the Los Angeles County Medical Association for 1960, succeeding Dr. William F. Quinn, whose term expired December 31. Dr. Elmer F. Gooel, Beverly Hills, was elected vice-president, Dr. Ian Macdonald, Los Angeles, secretary-treasurer, and Dr. Gordon K. Smith, a trustee.

* * *

Dr. George C. Griffith, professor of medicine at the University of Southern California School of Medicine, has been presented with the award of merit of the American Heart Association for his service to the organization's research program. Dr. Griffith is a former president of the Los Angeles County Heart Association and the California Heart Association.

SAN FRANCISCO

Dr. Roberta Fenlon became the first woman president of the San Francisco County Medical Society at the organization's recent annual meeting, and Dr. Malcolm Watts was named president-elect. Dr. Martha Mottram was re-elected vice-president, Dr. John B. Schaupp, secretary, and Dr. W. Dayton Clark, treasurer. Dr. Eugene M. Webb was reappointed editor of the *Bulletin.*

By a vote of 737 to 302 members of the society decided against identifying themselves as members of the society in their telephone book listings.

Opponents of the proposal urged that such a listing was both a form of advertising and "unfair coercion." It was also pointed out that the cost would be some $14,000 a year.

* * *

At the annual meeting of the **San Francisco chapter of the Pan American Medical Association** the following officers were elected for 1960: President, Dr. Paul G. Fuerstner; first vice-president, Dr. Jay Randolph Sharpsteen; second vice-president, Dr. Ray C. Atkinson; treasurer, Dr. John W. Ashford; secretary, Dr. Ivan A. May; chairman of regional administrators, Dr. Charles Pierre Mathé.

Dr. Fernando G. Gomez and Dr. Henry M. Weyrauch were elected to vacancies on the board of regional administrators.

GENERAL

The President and the President-Elect of the California Medical Association were appointed last month by Governor Edmund G. Brown to a 17-member **Governor's Committee on the Study of Medical Aid and Health.** The committee, made up of top medical leaders and others concerned with health problems, is charged with making a "comprehensive study" of care provided by government and by private facilities. Dr. Roger O. Egeberg, medical director of Los Angeles County Department of Charities, was named chairman of the committee. Others appointed were Dr. T. Eric Reynolds, Oakland, president of the California Medical Association, and Dr. Paul D. Foster, Los Angeles, president-elect; Dr. Nicholas V. Oddo, Long Beach, president of the California Osteopathic Association; John E. Smits, Glendale, administrator, Los Angeles Children's Hospital; Harry Polland, Berkeley, labor economist; J. Paul St. Sure, Piedmont, president, Pacific Maritime Association; H. Charles Abbot, Northridge, chairman, Blue Cross Commission; Mrs. Ernest Lilienthal, San Francisco, consumer representative; Jack E. A. Stumpf, San Bernardino, executive director, San Bernardino Community Services; Stephen I. Zetterberg, Pomona attorney and member of the State Board of Health; Dr. Joseph B. Platt, president, Harvey Mudd College, Claremont; State Senator Hugo Fisher, San Diego; Assemblyman Ron Cameron, Whittier.

Ex-officio members are Dr. Malcolm H. Merrill, State Director of Public Health; Dr. Daniel Blain, State Director of Mental Hygiene; and John Wedemeyer, State Director of Social Welfare.

MORE MEDICARE

A considerable segment of the medical care of dependents of military personnel will be returned to private hospitals and physicians in private practice as a result of changes in the Medicare program that went into effect January 1 of this year by order of the Defense Department. Services that had been lopped off in an economy move more than a year ago were restored owing to Congressional approval of an $88.8 million budget for Medicare this year.

However, the rule that dependents living with members of the armed forces must use military facilities unless these are certified by the medical officer to be unavailable, remains in force.

Thus, expansion of the list of benefits for dependents does not fully overcome the objections of organized medicine to the Defense Department method of supplying them with medical care. Leaders in medicine have pointed out that not only does caring for civilians in military hospitals remove them from private practice but it tends towards socialization in that it puts civilians under the care of physicians who are in the hire of the government.

The restored services include:

- Treatment for such cases that are not of an emergency nature but for which good medical practice dictates prompt attention (hernia, tonsillitis and the like).
- Care for acute emotional disorders for a period of 21 days or until other provision is made for more prolonged care.
- Emergency out-patient care for acute injuries or accidents, such as simple fractures which do not require hospitalization.
- The allowance of $75 for certain diagnostic tests, such as x-rays, is restored if these tests eventually lead to hospitalization of the dependent, and also the $50 allowance for certain post-hospitalization procedures, such as a blood transfusion for a leukemia patient before he is finally released as completely treated, has been restored.

The Cancer Advisory Council to the California State Department of Public Health which is to work closely with the department to help enforce the new antiquackery law strengthening "the regulation and control of the diagnosis, treatment, and cure of cancer," has been appointed by Governor Edmund G. Brown. Nine of the 15 members are physicians: Dr. John Wesley Cline, San Francisco surgeon, past president of the American Medical Association and president-elect of the American Cancer Society; Dr. L. Henry Garland, San Francisco radiologist and holder of the American Cancer Society's distinguished service medal; Dr. Sol R. Baker of Beverly Hills, chairman of the Los Angeles County branch of the American Cancer Society; Dr. Ian G. Macdonald, University of Southern California surgeon and radiologist; Dr. David A. Wood, pathologist, University of California in San Francisco and chairman of the C.M.A. Cancer Commission; Dr. Henry S. Kaplan, chairman of the radiology department, Stanford; Dr. Joseph F. Ross, associate dean, UCLA medical school; Dr. Orlyn B. Pratt, pathologist, College of Medical Evangelists, Los Angeles; and Dr. Maurice H. Simmers, co-ordinator of cancer training, College of Osteopathic Physicians and Surgeons, Los Angeles.

Representing non-profit cancer research institutes are Louis Tabak, president of the City of Hope, Los Angeles; and Bernard R. Baker of the Stanford Research Institute, Menlo Park. Other members are Sol Silberman, Jr., San Francisco, cancer coordinator for the University of California School of Dentistry; Allan Kay Jonas of Beverly Hills, a real estate development firm president and chairman of education for the American Cancer Society in Los Angeles County; and Richard Haber, Berkeley, an insurance consultant.

* * *

The California Medical Assistants' Association announced dates and places for its January and February educational symposia as follows:

Sunday, January 17, with the Orange County Medical Assistants' Association as host, an all-day symposium at the Anaheim Bowl, 1925 West Lincoln Street in Anaheim. Registration chairman, Mrs. Louis Quast, 600 East Chapman, Orange, California. Registration fee $1; luncheon, $2.50.

Sunday, February 7, San Joaquin and Stanislaus Chapters will hold their all-day symposium at the Hotel Stockton in Stockton. Registration chairman, Mildred Terzich, 1665 Berkeley Avenue, Stockton 5. Registration fee, $1; luncheon $3.00.

Sunday, February 7, a symposium in Riverside at the White Sands Hotel. For information, contact Mrs. Esther Tune, Riverside Medical Clinic, 3660 Arlington Avenue, Riverside.

* * *

Dr. Harold Martin Erickson, who has been director of the Oregon State Department of Public Health for the past 14 years, has accepted appointment as **deputy director of the California State Department of Public Health.** He took over his new duties January 4.

* * *

The California Pharmaceutical Association has pointed out that preparations of **narcotics mixed with other medicaments,** such as cough syrups and APC with codeine, which may now be **prescribed by telephone,** are often a matter of conflict between the pharmacist and the physician's nurse or secretary because she, instead of the doctor, often telephones the prescription order. Since the law distinctly states that the physician must personally do the telephoning of such prescriptions, most pharmacists refuse to accept them by telephone from anyone else. Recently a physician's nurse received a $100 fine and two pharmacists were cited for violation of this law, the association said.

* * *

Seventy-five years of continuous publication was celebrated by ***Annals of Surgery*** with the publication of its December issue. The oldest surgical journal in any language in the world, *Annals of Surgery* is a monthly review of surgical science and practice, and is published by the J. B. Lippincott Company, Philadelphia. It was founded by Lewis Stephen Pilcher, who remained editor for 50 years. From 1892 to 1897 it was published by the University of Pennsylvania, and in 1897 J. B. Lippincott Company took over the copyright.

POSTGRADUATE EDUCATION NOTICES

THIS BULLETIN of the dates of postgraduate education programs and the meetings of various medical organizations in California is supplied by the Committee on Postgraduate Activities of the California Medical Association. In order that they may be listed here, please send communications relating to your future medical or surgical programs to: Mrs. Margaret H. Griffith, Director, Postgraduate Activities, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5.

UNIVERSITY OF CALIFORNIA AT LOS ANGELES

CLINICAL POSTGRADUATE PROGRAM—MEXICO CITY, IN COOPERATION WITH THE NATIONAL SCHOOL OF MEDICINE, MEXICO CITY. Anesthesiology, Gastroenterology, Dermatology, Cardiology, Pediatrics and General Surgery. Feb. 25 through March 5, 1960.

Clinical Traineeships — Anesthesia, Dermatology and Pediatric Cardiology. Dates by arrangement. Minimum period—two weeks. Fee: Two weeks, $150.00; four weeks, $250.00.

Geriatrics in Clinical Practice. Saturday and Sunday, March 19 and 20. 12 hours.*

Preventive Psychiatry in Pediatric Practice. Friday through Sunday, April 8 through 10. University of California Residential Conference Center, Lake Arrowhead.‡

Inhalation Therapy and Office Proctology. April.†

Plastic Surgery of the Eye. May.†

Management of Medical Emergencies. Friday and Saturday, May 6 and 7. 12 hours.*

Low Back Pain. May.†

General Pediatrics. Sunday through Wednesday, July 17 through 20. Lake Arrowhead, University of California Conference Center. Fifteen hours.*

*Fees to be announced.
†Dates, fees and hours to be announced.
‡Hours and fees to be announced.

Advance Seminar in Internal Medicine. Wednesday through Sunday, July 20 through 24. University of California Conference Center, Lake Arrowhead. Eighteen hours.*

Dermatology in Office Practice. Monday and Tuesday, July 25 and 26. Twelve hours.*

Anesthesiology. Wednesday, Thursday and Friday, August 3, 4 and 5. Eighteen hours.*

The Multiple Injury Patient. Thursday, Friday and Saturday, August 11, 12 and 13. Eighteen hours.*

Arthritis and Rheumatism. Wednesday, August 24.‡

For Ancillary Personnel

Practical Clinical Chemistry for Laboratory Technologists — Advanced. Wednesdays, January 20 through March 9. Twenty-four hours. Fee: $40.00, Lecture and Lab. $20.00, Lecture only.

9th Conference—WICHE. Monday through Friday, February 1 through 5. Forty hours. Fee: $30.00.

Medical and Biological Photographic Workshop. Tuesdays, February 9 through March 29. Twenty hours. Fee: $35.00.

Systematic Bacteriology. Tuesdays and Thursdays, February 9 through April 28. Seventy-five hours. Fee: $75.00.

Vision Screening Techniques in the Classroom. Tuesdays, February 9 through May 24. Thirty hours. Fee: $25.00.

Cost Control with Emphasis on Records and Accounting Techniques. Tuesdays, February 9 through June 14. Forty-five hours. Fee: $35.00.

Prevention and Control of Disease. Wednesdays, February 10 through June 15. Forty-five hours. Fee: $35.00.

Basic Human Anatomy for Medical Assistants. Wednesdays, February 10 through June 15. Forty-five hours. Fee: $35.00.

Medical Terminology—Advanced. Tuesdays, February 16 through June 21. Forty-five hours. Fee: $35.00.

Beginning Medical Terminology. Wednesdays, February 17 through June 22. Forty-five hours. Fee: $35.00.

Pathological Physiology in Physical Treatment Procedures. Mondays, February 29 through April 25. Sixteen hours. Fee: $30.00.

Workshop in Practical Tuberculous Bacteriology. Saturday, March 5. Eight hours. Fee: $5.00.

Contact: Thomas H. Sternberg, M.D., assistant dean for Postgraduate Medical Education, U.C.L.A., Los Angeles 24. BRadshaw 2-8911, Ext. 7114.

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Man and His Environment—The Air We Breathe. Saturday through Monday, January 16 through 18. Twenty-one hours. Fee: $40.00.

Common and Uncommon Drugs for Children. Thursday through Saturday, January 21 through 23. Twenty-one hours. Fee: $50.00.

Seminars on the Psychological Aspects of Medical Practice—Series II. Every other Thursday evening, February 4 through May 19. Alameda-Contra Costa Medical Association Building, Oakland. Fee: $40.00.

Orthopedic Problems (Children's Hospital). Saturday, February 13. Seven hours. Fee: $12.50.

Practical Cytology. Saturday and Sunday, February 27 and 28. Eleven hours. Fee: $15.00.

Course for Physicians in General Practice (Mt. Zion Hospital, San Francisco). Monday through Saturday, March 7 through 12. Thirty-eight hours. Fee: $100.00.

Diagnostic Radiology. Wednesday through Sunday, March 16 through 20. Thirty-five hours.*

Physiological Basis for Diagnosis and Treatment. An Official Course of the American Physiological Society. Wednesday through Sunday, March 30 through April 3. Thirty-five hours. Fee: $90.00 or $25.00 per day.

Fundamental Practices of Radioactivity and the Diagnostic and Therapeutic Uses of Radioisotopes. Two or three month course limited to one enrollee per month. Fee: $350.00.

For Ancillary Personnel

Dermatology for Pharmacists. Thursday and Friday, January 21 and 22. Fourteen hours. Fee: $30.00.

Nursing and People (limited to 25). Monday through Friday, January 25 through February 5. Thirty hours. Fee: $30.00.

X-Ray Technology. Saturday and Sunday, February 6 and 7. Fourteen hours.*

Team Nursing: Tuesdays, February 9 through March 29. Sixteen hours. Fee: $15.00.

Advances in Psychiatric Nursing: Section I.—All registered nurses. Wednesday, February 24 through April 13. Sixteen hours. Fee: $25.00.

Advances in Psychiatric Nursing: Section II.—Nurses who have had training and practice in Psychiatric Nursing. Thursdays, February 25 through April 14. Sixteen hours. Fee: $25.00.

Rehabilitation Nursing. Monday through Friday, April 11 through 29. Fairmont Hospital, San Leandro.*

Nursing Care of Mothers and Children. Tuesdays, April 19 through June 7, Highland Hospital, Oakland. Sixteen hours. Fee: $25.00.

Nursing Care of Medical-Surgical Patients. Thursdays, April 21 through June 9. Highland Hospital, Oakland. Sixteen hours. Fee: $25.00.

Continuing Education Conference. Monday through Friday, June 13 through 17.*

Contact: Seymour M. Farber, M.D., assistant dean, Department of Continuing Medical Education, University of California Medical Center, San Francisco 22. MOntrose 4-3600, Ext. 665.

STANFORD UNIVERSITY SCHOOL OF MEDICINE

Morning Clinical Conferences, each Monday. *Contact:* D. H. Pischel, M.D., Professor, Division of Ophthalmology, Stanford University School of Medicine, Stanford Hospital, Clay and Webster Streets, San Francisco.

For information contact: Dean, Stanford University School of Medicine, 300 Pasteur Drive, Palo Alto.

*Fees to be announced.
‡Hours and fees to be announced.

UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES

Cardiac Resuscitation. Sponsored by the Los Angeles County Heart Association each Wednesday throughout the year, 4 to 6 p.m. USC Medical Research Building, Room 211, 2025 Zonal Avenue. Residents and interns of Los Angeles County, and all armed forces medical personnel admitted without fee. Tuition for all other physicians: $30.00. (Each session all-inclusive.)

Basic Home Course in Electrocardiography. One year postgraduate series, electrocardiogram interpretation by mail. Physicians may register at any time and receive all 52 issues. Fifty-two weeks. Fee: $100.00.

Advance Home Course in Electrocardiography. One year postgraduate series, electrocardiogram interpretation by mail. Fifty-two issues: $85.00. Physicians may register at any time.

Bedside Cardiology. Thursday, February 4 through April 21. Twenty-four hours. Fee: $65.00.

Therapeutic Interviewing. Thursdays, February 11 through April 28. Twenty-four hours. Fee: $100.00.

Symposium on Hypertension. Friday, March 11. Seven hours. Fee: $7.50.

Dermatology Clinic, One-Day Symposium. Thursday, March 24. Seven hours. Fee: $25.00.

Funduscopy in Internal Medicine. Every other Tuesday, April 5 through June 14. Twelve hours. Fee: $37.50.

Ward Walks in Rare Diseases. Thursdays, April 14 through June 16. Twenty hours. Fee: $100.00.

Practical Diagnosis and Management of Cardiovascular Diseases. Dates to be announced. Twenty-one hours. Fee: $75.00.

Contact: Phil R. Manning, M.D., associate dean and director, Postgraduate Division, University of Southern California School of Medicine, 2025 Zonal Avenue, Los Angeles 33. CApital 5-1511.

COLLEGE OF MEDICAL EVANGELISTS

CLINICAL TRAINEESHIPS available in all clinical departments by arrangement with the Postgraduate Division and the Chairman of the department or departments involved. Eighty hours minimum. Fee: As arranged.

Diseases of the Chest: Two and four-week Traineeships in cooperation with the Los Angeles County Hospital. Dates as arranged.

Anesthesia. Monday through Friday. Date as arranged. Six months. Fee: $350.

SPECIAL SKILLS available in the clinical departments, usually with a maximum of two or three students.

Surgical Anatomy: Head and Neck, April 20 through June 1, 63 hours. Fee: $75.00.

Surgical Anatomy: Head and Neck, April 20 through June 1. Twenty-four hours. Fee: $35.00.

ALUMNI POSTGRADUATE CONVENTION, held annually in cooperation with the Alumni Association of the School of Medicine. Refresher Courses, Sunday and Monday, February 28 and 29, at White Memorial Hospital, 1720 Brooklyn Avenue. Six hours each day. Fee: $20.00 each day. Scientific Assembly, Tuesday through Thursday, March 1 through 3, at the Ambassador Hotel. Twenty-four hours. Fee: $15.00. *Contact:* Walter Crawford, executive secretary, 316 N. Bailey Street, Los Angeles 33, ANgelus 2-2173.

TRAUMATOLOGY, a complete review including fractures and dislocations, soft tissue injuries, as well as complications involving the 3 cavities: Calvarium, thorax and abdomen. Limited to 15 candidates. Includes basic sciences, lectures, clinical demonstrations. Monday through Friday, March 7 through 11. Thirty-six hours. Fee: $100.00.

TROPICAL PUBLIC HEALTH: Causes, treatment and management of diseases found in the warm climates. For physicians who plan to serve abroad and other ancillary personnel. Monday through Friday, April 1 through May 30. Fee: $65.

JOINT MANIPULATION. Monday through Friday, 8:00 to 12:00, dates to be arranged. Twenty hours. Fee: $75.00.

For information contact: G. E. Norwood, M.D., assistant dean and chairman, Division of Postgraduate Medicine, College of Medical Evangelists, 1720 Brooklyn Ave., Los Angeles 33. ANgelus 9-7241, Ext. 214.

CALIFORNIA MEDICAL ASSOCIATION POSTGRADUATE COURSES

ANNUAL SESSION POSTGRADUATE COURSES

Infectious Diseases. 9 hours. Sunday, Monday and Tuesday, February 21, 22 and 23, 9:00 to 12:00 noon. February 21 at Chapman Park Hotel, February 22 and 23 at Ambassador Hotel, Los Angeles. Program by University of California School of Medicine, Los Angeles.

Clinical Endocrinology. 9 hours. Sunday, Monday and Tuesday, February 21, 22 and 23, 9 to 12 noon. February 21 at Los Angeles County Hospital, February 22 and 23 at Ambassador Hotel. Program by University of Southern California School of Medicine.

Minor Surgery. 9 hours. Sunday, Monday and Tuesday, February 21, 22 and 23, 9 to 12 noon. All sessions at White Memorial Hospital, Los Angeles. Program by College of Medical Evangelists.

POSTGRADUATE INSTITUTES—1960
(Tenth Anniversary Year)

West Coast Counties in cooperation with University of California, San Francisco, February 4 and 5. Del Monte Lodge, Pebble Beach. *Chairman:* Robert A. Helfrich, M.D., 440 E. Romie Lane, Salinas.

North Coast Counties in cooperation with College of Medical Evangelists, March 31 and April 1. Flamingo Hotel, Santa Rosa. *Chairman:* H. Ward Wick, M.D., 858 Fourth Street, Santa Rosa.

Southern Counties in cooperation with Stanford University School of Medicine, April 21 and 22. Palm Springs Riviera. *Chairman:* Robert M. Zweig, M.D., 7004 Magnolia, Riverside.

San Joaquin Valley Counties in cooperation with University of Southern California School of Medicine, April 28 and 29. Ahwahnee Hotel, Yosemite. *Chairman:* Campbell H. Covington, M.D., 2057 High Street, Selma.

Sacramento Valley Counties in cooperation with UCLA School of Medicine, July 1 and 2. Tahoe Tavern, Lake Tahoe. *Chairman:* Herbert W. Korngold, M.D., 1217 30th Street, Sacramento.

Contact: One of the chairmen listed above, or Postgraduate Activities Office, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5.

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AUDIO-DIGEST FOUNDATION, a nonprofit subsidiary of the C.M.A., offers (on a subscription basis) a series of six different hour-long tape recordings covering general practice, surgery, internal medicine, obstetrics and gynecology, pediatrics and anesthesiology. Designed to keep physicians posted on what is new and important in their respective fields, these programs survey current national and international literature of interest and contain selected highlights of on-the-spot recordings of national scientific meetings, panel discussions, symposia, and individual lectures. For information contact Mr. Claron L. Oakley, Editor, 1919 Wilshire Blvd., Los Angeles 57, HUbbard 3-3451.

Medical Dates Bulletin

JANUARY 1960 MEETINGS

THE RESEARCH STUDY CLUB OF LOS ANGELES Twenty-Ninth Annual Mid-Winter Convention in Ophthalmology and Otolaryngology. January 18 through 22. Ambassador Hotel, Los Angeles. *Contact:* Norman Jesberg, M.D., treasurer, 500 South Lucas Avenue, Los Angeles 17.

DIABETES AND BASIC METABOLIC PROBLEMS Eighth Postgraduate Course. January 20 through 22. Ambassador Hotel, Los Angeles. *Contact:* American Diabetes Association, Inc., 1 East 45th Street, New York 17, New York.

ORANGE COUNTY HEART ASSOCIATION Annual Symposium on Heart Disease. January 23, 8:30 a.m. to 5:30 p.m. Gourmet Restaurant, Disneyland Hotel, Anaheim. *Contact:* Howard G. Buswell, executive director, P. O. Box 1704, Santa Ana, KImberly 7-5976.

WESTERN ASSOCIATION OF PHYSICIANS. January 27 through 29. Carmel, California. *Contact:* Wade Volwiler, M.D., secretary, Department of Medicine, University of Washington, Seattle 5.

WESTERN SOCIETY FOR CLINICAL RESEARCH. January 28 through 30. Carmel-by-the-Sea. *Contact:* William N. Valentine, M.D., secretary, UCLA Medical Center, Department of Medicine, Los Angeles 24.

FRESNO COUNTY HEART ASSOCIATION Central California Eighth Annual Physicians Symposium. January 29, 8:30 a.m. to 5:30 p.m. Elks Club, Kings Canyon Road, Fresno. *Contact:* Max S. Millar, M.D., Chairman, Professional Services Committee, Fresno County Heart Association, 329 No. Van Ness, Fresno 1.

FEBRUARY MEETINGS

CONTRA COSTA COUNTY HEART ASSOCIATION Postgraduate Course for Physicians. Eight 2-hour weekly meetings. Monday, 8 to 10 p.m., beginning February 1. Contra Costa County Hospital. *Contact:* (Mrs.) Loyse C. Casebolt, executive director, 2030 N. Main Street, Walnut Creek.

BUTTE-GLENN COUNTIES HEART ASSOCIATION Cardiovascular Disease Symposium. February 3. Chico Elks Lodge, 9 a.m. to 5 p.m. *Contact:* Nathan C. Hanson, executive director, 310 Main Street, Room 215, Chico.

AMERICAN COLLEGE OF PHYSICIANS Annual Southern California Regional Meeting. February 6 and 7. Hotel del Coronado, Coronado. *Contact:* George C. Griffith, M.D., Governor for Southern California, A.C.P., P. O. Box 25, 1200 North State St., Los Angeles 33.

LOS ANGELES OBSTETRICAL AND GYNECOLOGICAL SOCIETY Forum for the younger specialists and residents. February 6 and 7, Ambassador Hotel, Los Angeles. *Contact:* Kenneth F. Morgan, M.D., Suite 910, 2010 Wilshire Blvd., Los Angeles 57.

OBSTETRICAL AND GYNECOLOGICAL ASSEMBLY OF SOUTHERN CALIFORNIA 15th Annual Mid-Winter Clinical Assembly. February 8 through 12. Ambassador Hotel, Los Angeles. For information write Frances W. Shippey, P. O. Box 57118, Flint Station, Los Angeles 57.

CALIFORNIA MEDICAL ASSOCIATION Annual Meeting, February 21 through 24, Ambassador Hotel, Los Angeles. *Contact:* John Hunton, executive secretary, 693 Sutter Street, San Francisco 2; or Ed Clancy, director of Public Relations, 2975 Wilshire Blvd., Los Angeles 5.

PACIFIC COAST SURGICAL ASSOCIATION Annual Meeting. February 21 through 24. Palm Springs. *Contact:* Carleton Mathewson, M.D., professor of surgery, Stanford Hospital, San Francisco.

MARCH MEETINGS

SOUTHWESTERN PEDIATRIC SOCIETY Spring Lecture Series, March 1 and 2, Statler Hotel, Los Angeles. *Contact:* Wendell Severy, M.D., program chairman, 11633 San Vicente Blvd., Los Angeles 49.

PIONEERS MEMORIAL HOSPITAL MEDICAL STAFF in association with the University of Oklahoma School of Medicine, Tenth Annual Postgraduate Assembly. March 18 and 19. Pioneers Memorial Hospital, Brawley. *Contact:* George C. Holleran, M.D., program chairman, P. O. Box 159, Brawley, Calif.

SOUTHWESTERN SURGICAL CONGRESS. March 28 through 31, Riviera Hotel, Las Vegas, Nevada. *Contact:* Miss Mary O'Leary, executive secretary, 1213 Medical Arts Building, Oklahoma City, Oklahoma.

NEUROSURGICAL SOCIETY OF AMERICA. March 30 through April 2, Del Monte Lodge, Del Monte. *Contact:* Raymond K. Thompson, M.D., secretary, 803 Cathedral Street, Baltimore 1.

APRIL MEETINGS

AMERICAN SOCIETY OF INTERNAL MEDICINE. April 1 through 3. Palace Hotel, San Francisco. *Contact:* Mr. Robert L. Richards, executive director, 350 Post Street, San Francisco 8.

AMERICAN COLLEGE OF PHYSICIANS Annual Meeting, April 4 through 9. Civic Auditorium, San Francisco. *Contact:* Edward C. Rosenow, Jr., M.D., executive director, 4200 Pine Street, Philadelphia 4.

CALIFORNIA MEDICAL ASSISTANTS ASSOCIATION Annual Convention. April 23 and 24. Claremont Hotel, Berkeley. *Contact:* Mrs. Anne Reece, president CMAA, 1837 So. Indiana St., Porterville, California.

MAY MEETINGS

Pan American Medical Association Congress. May 2 to 11. Mexico City. *Contact:* Joseph J. Eller, M.D., director general, 745 Fifth Avenue, New York, N. Y.

Memorial Hospital of Long Beach Medical Staff 2nd Annual Scientific Symposium "New Horizons in Medicine," to be held in conjunction with the formal opening of the new 400-bed Memorial Hospital of Long Beach. May 4. *Contact:* George X. Trimble, M.D., director of medical education, Seaside Memorial Hospital, 1401 Chestnut Avenue, Long Beach 13.

Valley Children's Hospital Spring Clinics. May 5 through 7. Roosevelt High School auditorium, Fresno. *Contact:* Valley Children's Hospital, Shields and Millbrook Avenues, Fresno.

Nevada Academy of General Practice 1960 Annual Assembly. May 12 through 14. Riverside Hotel, Reno, Nevada. Scientific program by University of California School of Medicine. *Contact:* Roy M. Peters, M.D., general chairman, 475 So. Arlington, Reno, Nevada.

Hawaii Medical Association Annual Meeting. May 12 through 15. *Contact:* Miss Lee McCaslin, executive secretary, 510 S. Beretania, Honolulu 13.

National Tuberculosis Association—American Trudeau Society Annual Meeting. May 16 through 18. Statler Hilton and Biltmore Hotels, Los Angeles. *Contact:* Mr. Sherman Asche, general chairman, Annual Meeting Committee, P. O. Box 4037, Santa Barbara.

American College of Nutrition 1960 Annual Convention. May 20 through 22. Huntington Sheraton Hotel, Pasadena. *Contact:* Donald B. Haynie, executive secretary, 10651 West Pico Blvd., Los Angeles 64.

California Heart Association Annual Meeting and Scientific Session. May 23 through 25. Claremont Hotel, Berkeley. *Contact:* J. Keith Thwaites, executive director, 1428 Bush Street, San Francisco 9.

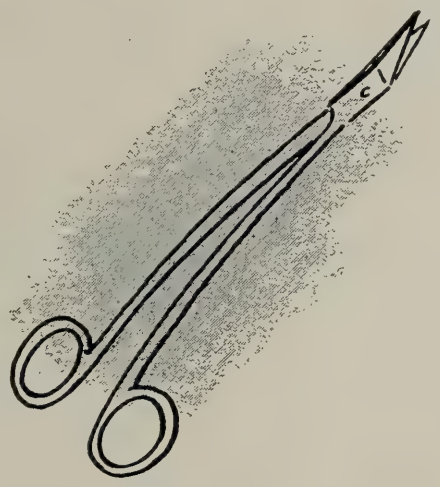
FALL 1960 MEETINGS

Reno Surgical Society 10th Annual Conference. August 18, 19 and 20. The Mapes Hotel, Reno. *Contact:* Harry B. Gilbert, M.D., 275 Hill Street, Reno, Nevada.

Nevada State Medical Association Annual Meeting. September 7 through 10. Stardust Hotel, Las Vegas. *Contact:* Nelson B. Neff, executive secretary, P. O. Box 2790, Reno, Nevada.

Pan-Pacific Surgical Association 8th Intensive Surgical Congress, embracing all Surgical Specialties. September 28 through October 5. Honolulu, Hawaii. *Contact:* F. J. Pinkerton, M.D., director general, Suite 230, Alexander Young Building, Honolulu 13.

Western Industrial Medical Association combined Meeting with 4th Western Industrial Health Conference. October 7 through 9. Jack Tar Hotel, San Francisco. *Contact:* Verne G. Ghormley, M.D., president, 3032 Tulare Street, Fresno 21.





THE PHYSICIAN'S *Bookshelf*

PRINCIPLES OF DISABILITY EVALUATION—Wilmer Cauthorn Smith, M.D., Chief Medical Advisor, Oregon State Industrial Accident Commission; Fellow, American Association for the Surgery of Trauma. J. B. Lippincott Company, East Washington Square, Philadelphia 5, Pa., 1959. 210 pages, $7.00.

This text is an excellent reference for any physician who is not experienced in the field of disability evaluation, since the author stresses the need for an understanding of the philosophy upon which the subject is based. The book is divided into four sections. The first section explains the relationship of the physician to the problem, the basic principles that are applicable, the need for uniformity, and methods of reporting. The second section deals with the relationship of cause and effect, the concept of permanence, which disabilities are medically ratable, and concepts of gainful employment and general industrial occupation. Section three covers the problem of relationship in detail, stressing its importance and the prerequisites for such determination. Section four discusses the actual evaluation technique in a fashion usable under most legislative acts pertaining to disability evaluation.

Although the techniques of evaluation, presented by the author, do not have application in the California system (due to its variance in method from most other state systems), the material in the first three sections would benefit anyone in the field of disability evaluation here or elsewhere. Section three, alone, covers a subject that relatively few physicians understand sufficiently, or fail to utilize, when dealing with occupational injuries and diseases either before or when permanent.

In my opinion, this volume meets a need for good instructional material in an area of medical education that has been too long neglected. The first three sections should class as a "must" for anyone becoming involved to any appreciable extent in the field of disability evaluation.

PACKARD THURBER, JR., M.D.

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PHYSICAL DIAGNOSIS—The History and Examination of the Patient—John A. Prior, M.D., Professor of Medicine, Ohio State University College of Medicine, Columbus, Ohio; and Jack S. Silberstein, M.D., Clinical Associate Professor of Medicine, Ohio State University College of Medicine, Columbus, Ohio. The C. V. Mosby Company, St. Louis, 1959. 388 pages, with 193 illustrations, $7.50.

This book embodies the course in physical diagnosis taught at the Ohio State University School of Medicine. In the authors' opinion most text books on physical diagnosis devote too much space to the discussion of disease processes, at times even including laboratory data. They feel that the fundamental objective of a course or a text on physical diagnosis should remain—as it has always been—to teach the student how to obtain a good history and how to perform a satisfactory physical examination.

Therefore, the present book emphasizes at length a careful history and physical examination of the normal patient. A relatively detailed discussion of the review of body systems has been included to acquaint the student with the large number of medical terms he must master in a short time and to explain the medical significance of these terms.

The authors' ideas seem valid and are presented logically. The book is directed to the second-year student and presents its material at this level. Graphs and diagrams are used to a larger extent than in most texts. The illustrations are numerous and clear. The techniques of examination are good and are given in painstaking manner.

Despite the authors' announced good intention to eliminate the use of eponyms the reviewer finds quite a few instances where they have not succeeded: for example, on page 262 Dupuytren's contracture, page 272 Raynaud's phenomenon and Buerger's disease, page 286 Bell's phenomenon.

To the student seeking a sound, basic text on physical diagnosis this book can be recommended.

EDGAR WAYBURN, M.D.

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CENTAUR—Essays on the History of Medical Ideas—Felix Marti-Ibanez, M.D., Professor and Director of the Department of the History of Medicine, New York Medical College, Flower and Fifth Avenue Hospitals, New York, N. Y.; Editor-in-Chief of MD Medical Newsmagazine. MD Publications, Inc., 30 East 60th Street, New York 22, N. Y., 1958. 714 pages, $6.00.

Doctor Felix Marti-Ibanez is a prolific, able, restless man with a glib and facile style of writing. He has lived in a number of places and has been successively a psychiatrist, public health administrator, pharmaceutical house director, editor of *MD* and professor of the history of medicine. He has written a great many articles and short stories, as well as assorted columns in newspapers and magazines.

The articles in this book are a collection of his essays—previously published or presented verbally. All of them have as a common denominator an historico-medical background, and the author's desire to impress upon the physician that "his professional endeavors and thoughts are clothed in the fabric of history."

As Doctor Felix Marti-Ibanez says, "These articles are but leaves torn from the notebook of a restless man, who has moved through the world of the history of medicine in much the same way he moves through the world itself and through life . . . jotting down his notes about them with more enthusiasm than meticulousness, leaving others more expert to complete the task."

The essays skip from subject to subject. They reflect the author's judgment of himself as a man of many ideas, with an amazing range of interests and a great deal of information. They also reflect a superficial skimming of many of the subjects. They often express personal opinions and conclusions not in agreement with other historians who may have investigated more deeply.

Doctor Marti-Ibanez is an interesting and provocative author. This book may well fit on the bedside table of the physician, if not in his library.

EDGAR WAYBURN, M.D.

House of Delegates Agenda

(Tentative)

1960 Annual Session

Embassy Room, Ambassador Hotel

Speaker.....James C. Doyle, Beverly Hills
Vice-Speaker.....Ivan C. Heron, San Francisco
Secretary.....Matthew N. Hosmer, San Francisco

FIRST MEETING

Saturday, February 20, at 7:30 p.m.

ORDER OF BUSINESS

1. Call to order.
2. Report of Committee on Credentials, and Organization of the House of Delegates.
3. Roll call.
4. Announcement and approval of Reference Committees.
 (a) Committee on Credentials. (Delegates must register with the Committee.)
 (b) Reference Committee on the Reports of Officers, the Council, the Commissions, and Standing and Special Committees. (Reference Committee No. 1.)
 (c) Reference Committee on Finance, to review the reports of the Secretary and the Executive Secretary and to study and make recommendations to the House of Delegates on the budget submitted by the Council and the amount of dues for the ensuing year. (Reference Committee No. 2.)
 (d) Reference Committee on Resolutions and New and Miscellaneous Business. (Reference Committee No. 3.)
 (e) Reference Committee (No. 3A) on Resolutions and New and Miscellaneous Business.
 (f) Reference Committee on Amendments to the Constitution and By-Laws. (Reference Committee No. 4.)
 (g) Reference Committee on C.P.S. Business.
5. Address by President of the Woman's Auxiliary to the C.M.A.—Mrs. Theodore A. Poska, Eureka.
6. Address by President T. Eric Reynolds—Presentation of 50-Year Awards.
7. Miscellaneous announcements by the Speaker. (Stenographic service to secure copies of resolutions, etc.)
8. Report of the President—T. Eric Reynolds.
9. Report of the President-elect—Paul D. Foster.
10. Report of the Speaker of the House of Delegates—James C. Doyle.
11. Report of the Vice-Speaker of the House of Delegates—Ivan C. Heron.
12. Report of the Trustees of the California Medical Association—T. Eric Reynolds.
13. Report of Physicians' Benevolence Fund, Inc.—T. Eric Reynolds, President.
14. Report of the Secretary—Matthew N. Hosmer.
15. Report of the Editor—Dwight L. Wilbur.
16. Report of the Executive Secretary—John Hunton.
17. Report of Legal Counsel—Peart, Baraty and Hassard.
18. Report of the Advisory Committee for Emergency Action.
19. Report of the Council—Donald D. Lum, Chairman.
20. Reports of District Councilors.
21. Report of C.P.S. Board of Trustees—A. A. Morrison, President.
22. Reports of Commissions.
 (a) Cancer Commission—David A. Wood.
 (b) Commission on Community Health Services—James C. MacLaggan.
 (1) Committee on Allied Health Agencies—James C. MacLaggan.
 (2) Committee on Blood Banks—Andrew M. Henderson, Jr.
 (3) Committee on Civil Defense and Disaster—Justin J. Stein.
 (4) Committee on Community and Rural Health—Robb Smith.
 (5) Committee on Industrial Health—Jerome W. Shilling.
 (6) Committee on School Health—Charles A. Branthaver.
 (7) Committee on Traffic Safety—Chester K. Barta.
 (c) Commission on Medical Education—Albert C. Daniels.
 (1) Committee on Maternal and Child Care—James W. Ravenscroft.
 (2) Committee on Postgraduate Activities—Albert C. Daniels.
 (3) Committee on Scientific Work—Albert C. Daniels.
 (d) Commission on Medical Services—Francis J. Cox.
 (1) Committee on Aging—Thomas N. Elmendorf.
 (2) Committee on Fees—H. Dean Hoskins.
 (3) Committee on Government Financed Medical Care—John M. Rumsey.
 (4) Liaison Committee to State Department of Social Welfare—Samuel R. Sherman.
 (5) Committee on Rehabilitation—Elizabeth Austin.
 (6) Subcommittee on Foundations—John F. Murray.
 (7) Subcommittee on Uniform Claims Forms—Joseph W. Telford.

(e) Commission on Professional Welfare—Arthur A. Kirchner.
 (1) Committee on Health and Accident Insurance —Homer C. Pheasant.
 (2) Committee on Private Practice of Medicine by Medical School Faculty Members—Herbert Moffitt, Jr.
 (3) Medical Review and Advisory Board—Arthur A. Kirchner.

(f) Commission on Public Agencies—Warren L. Bostick.
 (1) Committee on Adoptions—George K. Herzog, Jr.
 (2) Committee on Mental Health—Stuart C. Knox.
 (3) Committee on Other Professions—Wayne Pollock.
 (4) Committee on State Medical Services—Warren L. Bostick.
 (5) Committee on Veterans Affairs—Charles B. Hudson.

(g) Commission on Public Policy—Dan O. Kilroy.
 (1) Committee on Legislation—Dan O. Kilroy.
 (2) Committee on Public Relations—Malcolm S. Watts.

(h) Judicial Commission—Donald A. Charnock.

23. Reports of Other Committees.
 (a) Advertising Committee—Robertson Ward.
 (b) Bureau of Research and Planning—Francis E. West.
 (c) Finance Committee—Ivan C. Heron.
 (d) Committee on History and Obituaries—J. Marion Read.
 (e) Liaison Committee with California Hospital Association—Francis E. West.
 (f) Liaison Committee with State Bar of California—Francis E. West.
 (g) Medical Executives Conference—William K. Scheuber.
 (h) Constitution Study Committee—Sam J. McClendon.
 (i) Committee on Social Security Poll Format—James C. Doyle.
 (j) Delegates to the A.M.A.—Donald Cass.

24. Old and Unfinished Business.
 (a) Constitutional Amendment No. 1.

25. New Business.

SECOND MEETING

Wednesday, February 24, at 9:30 a.m.

ORDER OF BUSINESS

1. Call to order.
2. Supplemental report of Credentials Committee.
3. Roll call.
4. Secretary's announcement of Council's selection of time and place for the 1961 annual session.
5. Election of officers:
 (a) President-elect.
 (b) Speaker.
 (c) Vice-speaker.

(d) Councilors (three-year terms):
 (1) Third District—Office No. 2—William F. Quinn, Los Angeles (term expiring).
 (2) Third District—Office No. 5—Joseph P. O'Connor, Pasadena (term expiring).
 (3) Third District—Office No. 7—New Office, term expiring 1962.
 Third District—Los Angeles County.
 (4) Fifth District—Donald C. Harrington, Stockton (term expiring).
 Fifth District—Calaveras, Fresno, Kern, Kings, Madera, Mariposa, Merced, San Joaquin, Stanislaus, Tulare and Tuolumne counties.
 (5) Sixth District—Office No. 2—New Office, term expiring 1962.
 Sixth District—Monterey, San Benito, San Mateo, Santa Clara and Santa Cruz counties.
 (6) Seventh District—Office No. 1—Samuel R. Sherman, San Francisco (term expiring).
 Seventh District—San Francisco County.
 (7) Eighth District—Donald D. Lum, Alameda (term expiring).
 Eighth District—Alameda and Contra Costa counties.

(e) Delegates to the American Medical Association: Delegates and Alternates to the American Medical Association are elected for terms of two calendar years. The Delegates and Alternates to be elected at this meeting will serve for two calendar years starting January 1, 1961.
Incumbents:
 (1) Leopold H. Fraser, Richmond (term expiring).
 (2) E. Vincent Askey, Los Angeles (term expiring).
 (3) Dwight L. Wilbur, San Francisco (term expiring).
 (4) Donald Cass, Los Angeles (term expiring).
 (5) J. Lafe Ludwig, Los Angeles (term expiring).
 (6) R. Stanley Kneeshaw, San Jose (term expiring).
 (7) C. J. Attwood, Oakland (term expiring).
 (8) James E. Feldmayer, Exeter (term expiring).
 (9) H. Milton Van Dyke, Long Beach (term expiring).

(f) Alternates to the American Medical Association. All terms expiring. All offices for two-year terms starting January 1, 1961:
 (1) Hartzell H. Ray, San Mateo (alternate to Leopold H. Fraser).
 (2) James C. Doyle, Beverly Hills (alternate to E. Vincent Askey).
 (3) Francis J. Cox, San Francisco (alternate to Dwight L. Wilbur).
 (4) J. Norman O'Neill, Los Angeles (alternate to Donald Cass).
 (5) Samuel R. Sherman, San Francisco (alternate to J. Lafe Ludwig).
 (6) Burt L. Davis, Palo Alto (alternate to R. Stanley Kneeshaw).
 (7) Arlo A. Morrison, Ventura (alternate to C. J. Attwood).
 (8) Ralph C. Teall, Sacramento (alternate to James E. Feldmayer).
 (9) Omer W. Wheeler, Riverside (alternate to H. Milton Van Dyke).

6. Election of C.P.S. Trustees (three-year terms):
 Report of C.M.A. Council as Nominating Committee.
 Incumbents:
 (a) Dudley M. Cobb, Jr., Los Angeles.
 (b) Mr. Ransom M. Cook, San Francisco.
 (c) John R. Hilsabeck, Santa Ana.
 (d) Leslie B. Magoon, San Jose.
 (e) John G. Morrison, San Leandro.
 (f) John F. Wanless, San Diego (ineligible for reelection).
7. Announcement by Secretary.
 Council's nominations of members of Commissions and Committees (for approval by the House of Delegates).
8. Reports of Reference Committees:
 (a) Reports of Reference Committee No. 1 on Reports of Officers, the Council, Commission and Standing and Special Committees.
 (b) Report of Reference Committee No. 2 on Reports of the Secretary, the Executive Secretary, and the budget and dues.
 (c) Report of Reference Committee No. 3 on Resolutions and New and Miscellaneous Business.
 (d) Report of Reference Committee No. 3A on Resolutions and New and Miscellaneous Business.
 (e) Report of Reference Committee No. 4 on Amendments to the Constitution and By-Laws.
 (f) Report of Reference Committee on C.P.S. Business.
9. Unfinished Business.
10. New Business.
11. Presentation of Officers:
 President.
 President-elect.
 Speaker.
 Vice-speaker.
12. Presentation of certificate to retiring president—T. Eric Reynolds.
13. Approval of minutes. (Committee to edit.)
14. Adjournment.

JAMES C. DOYLE, *Speaker*
MATTHEW N. HOSMER, *Secretary*

CONSTITUTIONAL AMENDMENT OFFERED

A proposed amendment to the Constitution of the California Medical Association was offered at the 1959 session and, in accordance with provisions of the Constitution, was referred to the Reference Committee on Amendments to the Constitution and By-Laws. The proposed amendment must lie on the table for one year and be published twice during that period in CALIFORNIA MEDICINE.

The reference committee suggested that this proposal be studied by the Constitution Study Committee during the year. The proposal will be referred in 1960 to a reference Committee for additional study and recommendations to the 1960 House of Delegates.

Constitutional Amendment No. 1.
Author: Arthur Olson.
Representing: Santa Barbara County Medical Society.

Resolved: That Article VIII of the Constitution of the C.M.A. be amended by renumbering the present sections in said Article to 2, 3 and 4 and inserting a new Section 1 as follows:

Section 1.—Eligibility for Appointment

Eligibility for appointment or election to any position, to any committee, or to in any way represent the C.M.A., or to formulate policy for C.M.A., shall depend on the member's not holding a salaried position with or acting in an advisory capacity for, or being retained by a commercial insurance company or health plan which handles health or accident problems during the term of election or appointment. Nor shall such delegates or committee members hold a remunerative political position either appointive or elective. Association with California Physicians' Service is specifically excluded.

ROOM DIRECTORY

(Tentative)

C.M.A. OFFICE.....Rooms 125-126

Reference Committee No. 1—Reports of Officers, Council, Commissions, Standing and Special Committees.....Oval Suite D

Reference Committee No. 2—Finance—Reports of Secretary, Executive Secretary and the Budget.....Rose Room

Reference Committee No. 3—Resolutions, New and Miscellaneous Business.....Hotel Chancellor

Reference Committee No. 3A—Resolutions, New and Miscellaneous Business.....Garden Room

Reference Committee No. 4—Amendments to the Constitution and By-Laws.....Oval Suite E

Reference Committee on C.P.S. Business.....Oval Suite C

PRE-CONVENTION REPORTS

Officers • Councilors • Committees

REPORTS OF GENERAL OFFICERS

REPORT OF THE PRESIDENT

To the House of Delegates:

Since the annual meeting of the House of Delegates in February, 1959, I have discussed medical affairs with most of the county societies not covered during my term as President-Elect. I have continued to serve as a member of the A.M.A. Committee on Insurance and Prepayment, under the Council on Medical Services, and have attended four regional conferences of state societies, one at Pittsburgh, Pennsylvania; another at Memphis, Tennessee; a third at Portland, Oregon, and a fourth at Minneapolis, Minnesota. These, I think, have been quite valuable in establishing policy for organized medicine in America.

I attended the meeting of the House of Delegates of the American Medical Association at Atlantic City. I presented testimony at the hearings of the House Ways and Means Committee on House Resolution 4700 (the Forand Bill) in July in Washington, D. C. Also, I presented testimony before the McNamara Committee of the Senate in San Francisco in October of this year. As President, I spoke before the annual meeting of the California Hospital Association at its meeting in Yosemite in October and presented a paper before the Western Conference of Prepaid Medical Care Plans in Honolulu on November 9.

I wish to take this opportunity to thank all the many committees who have so ably assisted in carrying forward the affairs of California medicine and the doctors of the constituent societies who have been so helpful in this regard, as well as the loyal staff of C.M.A. who have, during the year, moved into the new and very excellent quarters.

Respectfully submitted,

T. Eric Reynolds, *President*

REPORT OF THE SPEAKER AND VICE-SPEAKER OF THE HOUSE OF DELEGATES

To the President and the House of Delegates:

Your Speaker and Vice-Speaker sincerely appreciate your confidence in affording them the opportunity to serve and represent the House of Delegates and the California Medical Association. We have participated in the deliberations of the Council and numerous other committee meetings.

For our Annual Session in 1960 the House of Delegates will convene Saturday evening. We will conclude our usual first day's agenda Sunday morning, with recess about noon. This change has been instituted in order to allow more time for the delegates to attend the scientific meetings. It is hoped that this arrangement will prove beneficial. The second meeting of the House will remain, as formerly, on Wednesday.

The Constitution Study Committee has been reactivated and have some knotty problems under study for advisement. Members of this committee are: C. J. Attwood, Oakland (acting chairman, due to the illness of Sam McClendon); Carl Hadley, San Bernardino; James Yant, Sacramento; Leslie Magoon, San Jose; Jay J. Crane, Los Angeles; James Moore, Ventura; Robb Smith, Orange Cove; Edward I. Levy, San Diego; Edgar Wayburn, San Francisco; Fred Olson, Fortuna.

A new committee appointed by your Speaker and Vice-Speaker, at your request, deserves special credit for painstaking effort and unequivocal consideration of the controversial social security format. These committee members are:

Pro Members: Ira H. Wilson, San Diego; John B. Hamilton, Glendale; Arthur R. Olson, Santa Barbara; James R. Powell, Stockton; Alf T. Haerem, Redwood City; George K. Herzog, San Francisco; Charles L. Dimmler, Jr., Piedmont; Sidney W. Penn, Long Beach; Lewis Gunther, Beverly Hills; Harold B. Miles, Santa Barbara.

Con Members: Roger C. Isenhour, San Diego; L. J. Mongeon, Fullerton; J. Lafe Ludwig, Los Angeles; Cloyce W. Huff, Oxnard; Louis J. Armanino, Stockton; Edward Liston, Palo Alto; A. Justin Williams, San Francisco; Charles B. Hudson, Oakland; Frank A. MacDonald, Sacramento; James H. Nelson, Ojai.

The results of their study have been disseminated to the respective county medical societies interested in conducting a poll on this subject.

Should the number of resolutions to be submitted warrant, committees 3A and 3B will be reactivated to carry the additional volume of work.

Your Speaker and Vice-Speaker enjoy to the utmost the cordial and cooperative spirit existing between the House and the chair. We encourage constructive suggestions and recommendations. We will, to the best of our ability, perform our tasks in a humble, honest and democratic manner.

Respectfully submitted,

James C. Doyle, *Speaker*
Ivan C. Heron, *Vice-Speaker*

REPORT OF THE PRESIDENT OF THE TRUSTEES OF THE C.M.A.

To the House of Delegates:

The Trustees of the California Medical Association is a nonprofit corporation maintained to hold excess assets of the California Medical Association. Its members are at all times the members of the Council of the California Medical Association, so that its actions are constantly geared with the official actions of the Council.

Elsewhere in this issue appears the audited report of the corporation for the fiscal year ended June 30, 1959. This shows that operations for the year were carried on with an excess of $15,809 of income over expenditures.

On July 1, 1959, the corporation took title to a building located at Sutter and Taylor Streets, San Francisco, where the California Medical Association now makes its headquarters. Space in the building not needed for C.M.A. purposes is available for rental, and several tenants, carefully selected, now occupy space. This arrangement makes it possible to plan for further expansion of the Association and relieves the crowded condition of the former rented quarters. Ownership of the building entails additional responsibilities for the Association staff and will result in a more complex financial statement in future years, when income and various building expense items will be reported.

The corporation has arranged a line of credit with its bank, so that funds for Association activities may be bor-

rowed as needed. As of December 1, 1959, bank credit of $305,000 was being utilized, the bulk of this amount representing borrowings to finance the building purchase.

Respectfully submitted,

T. Eric Reynolds, *President*

REPORT OF THE PHYSICIANS' BENEVOLENCE FUND, INC.

To the House of Delegates:

Physicians' Benevolence Fund, Inc., is the outgrowth of a Benevolence Committee established by the House of Delegates in 1940. Its purpose is to provide financial assistance to needy physicians or their families. Its principal source of income is a contribution of $1 per active member per year by the California Medical Association. This is the minimum provided by the Constitution of the California Medical Association.

Elsewhere in this issue appears the financial report of the fund for the fiscal year ended June 30, 1959. It shows, in brief, that the fund received $16,195 from the Association in the period reported, that another $2,436 was contributed by the Woman's Auxiliary and $2,335 was earned in interest on investments.

Payments of $15,745 were made to beneficiaries and operating costs of $250 were incurred. The California Medical Association provides all operating facilities, personnel and costs other than the annual auditing fee. The fund ended the fiscal year with an excess of $4,971 of income over expenditures; of this excess, $2,335 represented interest received on investments, indicating that benefits paid during the year amounted to within $2,886 of contributed funds.

Benefits went to the Los Angeles Physicians Aid Association, which maintains a home for needy physicians and their families, and to several physicians or widows of physicians throughout the state. Two beneficiaries were added during the year, both widows of physicians with minor children whose own income-earning capacity was diminished or eliminated by chronic illness.

An operating committee consisting of Doctors Ford P. Cady, Elizabeth Mason-Hohl, Don C. Musser, Clyde L. Boice and George C. Wolf reviews all applications for assistance and sets the amount and duration of aid to be provided. The thanks of the Association are due them for their constant readiness to act on applications and to follow a set of standards which is designed to promote fairness and financial integrity at the same time.

Thanks are also due to the county medical societies and their auxiliaries which have been willing to secure information needed to process the applications and to oversee the distribution and use of funds provided for beneficiaries.

Respectfully submitted,

T. Eric Reynolds, *President*

REPORT OF THE SECRETARY

To the President and the House of Delegates:

I have attended all of the meetings and carried out the duties of secretary as designated by the Constitution as well as the duties assigned to me by the Council.

Respectfully submitted,

Matthew N. Hosmer, *Secretary*

REPORT OF THE EDITOR

To the President and the House of Delegates:

A little at a time over the past decade, California Medicine has made progress toward one of its goals: To make the language of its scientific articles readily understandable to all its readers. The concept is that your journal should be so written that a physician in any specialty should be able to read an article about any other specialty, and a general physician should be able to read about them all, without having to struggle through a provincial patois. Progress in this direction has been of two orders, one brought about by plan and work, the other apparently by happenstance. On the one hand, material offered for publication undergoes a somewhat more rigorous course of redaction than is usual with state medical journals; and on the other the manuscripts as they are originally submitted seem to be gradually improving in form.

In the year past, the number of scientific articles printed was reduced a little and the space given to organizational activities was a little greater.

To fill a growing need on the Editorial Board, the services of two well known biostatisticians have been enlisted. Frederick J. Moore, M.D., professor of public health at the University of Southern California, and Jacob Yerushalmy, Ph.D., professor of biostatistics at the University of California School of Public Health, Berkeley, have accepted appointment as advisors in such matters.

Early in the year the board was saddened by word of the death of Dr. Frederick C. Bost, of San Francisco, who had served well and long. Dr. Don King has accepted appointment as the orthopedic consultant to succeed him.

This year no less than ever, the editor welcomes this opportunity to acknowledge with gratitude not only the great help of the members of the editorial board, but that of many others who are called upon from time to time for special services to California Medicine. Members of the Editorial Board have served faithfully and generally promptly in aiding the Editor and the editorial staff. Thanks go to them for a job well done. Thanks also to the many physicians throughout the state who have been helpful in the preparation of book reviews, in giving advice and in many ways making California Medicine a better journal.

California Medicine on every page shows evidence of the devoted service of the editorial staff—Bob Edwards who keeps a constant close watch on all editorial material, and Mrs. Barbara Rooney who is so helpful in keeping the editorial office running efficiently in every detail. John Hunton as in the past has been a most useful writer of editorials.

Respectfully submitted,

Dwight L. Wilbur, *Editor*

REPORT OF THE EXECUTIVE SECRETARY

This report might more properly be labeled "Report by the Executive Secretary" since it represents primarily a report of the entire C.M.A. staff with the writer acting as draftsman.

The report will be given in sections and will take up only the highlights of the year's activities. Where specific questions may arise in the House of Delegates on any part of the report, one or another staff member will be available for more detailed reporting.

1. *Administrative.* The Association moved its headquarters office in late October to the present address, 693 Sutter Street, San Francisco. Here, in a building owned by the Trustees of the C.M.A., there is adequate room for all departments, a welcome contrast to the overcrowded conditions prevailing at the former location. The building is six stories and a basement. The Association occupies the fourth and fifth floors completely, has some offices on the sixth floor and maintains the basement area for storage, for multigraph and mimeograph reproducing, for addressing and for mailing. Formerly, some of these functions were performed by

independent contractors because of lack of space in the C.M.A. quarters.

The move from one office to another was accomplished with a minimum of lost time and effectiveness and the shaking-down period has now ended and all offices set up to function at maximum efficiency. An internal telephone system provides intercommunications between offices and a new type telephone switchboard has eliminated much of the time-consuming functions formerly associated with that type of service.

The new quarters are tastefully decorated and furnished in a manner deemed adequate for the prestige of the Association without being extravagant. So far as possible, furniture was refinished and put into use; where appearance was a prime factor and where utility was better served, new furnishings were purchased.

In the line of equipment, a lithograph machine was purchased and installed. This represents a sizeable investment but the machine is designed to turn out superior reproducing work and to enable the Association to produce forms and other material which heretofore has been purchased from suppliers. Two experienced operators have been employed. It is estimated that the cost of operating these services will be less than was formerly paid to others and that a greater volume of work and improved control over the work will result from this setup.

2. *Personnel.* In the headquarters and Los Angeles offices at this time are 13 employees classed in an executive capacity and 24 in a secretarial or clerical capacity. Of the executive employees, two represent the Editor of California Medicine and a liaison employee to the Commission on Public Policy, both of whom draw nominal salaries and contribute only part of their time. Two executive employees, the director of public relations and the director of postgraduate activities, are located in Los Angeles and the other nine in San Francisco. This is an increase of one since last year's report, the new executive being a librarian who is now establishing a technical library for the Bureau of Research & Planning.

Two clerical employees are located in the Los Angeles office and the other 22, including two on a part-time basis, are in San Francisco. The 20 full-time clerical employees in San Francisco represent an increase of five employees over a year ago. The new employees include two in the addressing and mailing department now operated internally and one each in the membership, filing and library departments.

3. *Membership.* As required by the By-Laws, the membership of the Association, listed by county societies, is listed below. The increase of 716 active members from November 1, 1958, to the same date in 1959, represents a gain of 4.54 per cent, which is about the percentage gain registered in recent years. It is interesting to note that the membership total shows a steady gain each year and that the progression is maintained at a fairly steady rate each year. The ratio of physicians to population is being maintained on about a 1:750 basis.

The county society membership figures are shown here on a November 1 count for each year simply as a basis of comparison. Representation in the House of Delegates is based on a membership count now taken on September 1.

Active Membership in the C.M.A. by County Societies

	Nov. 1, 1958	*Nov. 1, 1959*
Alameda-Contra Costa	1,381	1,401
Butte-Glenn	84	84
Fresno	276	277
Humboldt	80	86
Imperial	51	54
Inyo-Mono	10	9
Kern	206	212
Kings	36	36
Lassen-Plumas-Modoc	24	26
Los Angeles	6,621	6,920
Madera	15	16
Marin	179	180
Mendocino-Lake	59	59
Merced	53	56
Monterey	176	184
Napa	85	81
Orange	478	541
Placer-Nevada-Sierra	65	69
Riverside	208	213
Sacramento	397	423
San Benito	10	12
San Bernardino	340	356
San Diego	811	871
San Francisco	1,636	1,673
San Joaquin	208	210
San Luis Obispo	79	84
San Mateo	466	507
Santa Barbara	199	217
Santa Clara	647	707
Santa Cruz	90	94
Shasta-Trinity	58	62
Siskiyou	23	22
Solano	73	73
Sonoma	165	166
Stanislaus	145	155
Tehama	14	17
Tulare	109	113
Ventura	115	118
Yolo	43	45
Yuba-Sutter-Colusa	51	53
Total	15,766	16,482

4. *Financial.* Financial reports for the Association, for the Trustees of the California Medical Association and for Physicians' Benevolence Fund, Inc., are shown elsewhere in this issue under the report of the Finance Committee.

It should be noted in this report that the books and accounts of all three organizations are maintained by C.M.A. staff members. No salaries or other overhead expenses are charged against the two corporate entities.

As is pointed out in the report of the Finance Committee, the Association has been operating at a deficit for the past two years and in so doing has depleted its working funds. The C.M.A. receives most of its annual income during the early months of the year, when annual dues are received from the county societies. Its expenses, however, continue throughout the year. This means that interim financial reports during the calendar or fiscal year are subject to seasonal variations and consequent interpretation. The Finance Committee is now working on proposals to eliminate these unwanted reflections and to make it clear to the Council at all times just where the Association stands financially.

When year-end borrowing is needed by the Association, its one source of funds is from the Trustees of the C.M.A., which has established a line of credit at the bank to permit seasonal borrowings as needed and seasonal repayments when funds are available. The Trustees have had to borrow to complete payment on the 693 Sutter building and to supply funds for the C.M.A. for operations in the final two months of the year. It is anticipated that repayment of all or a large part of these loans may be made in the early months of 1960 and interest costs reduced accordingly.

From a budgetary point of view, the current budget is running somewhat ahead of anticipated income but not to an alarming extent. The budget was originally adopted on a very narrow basis, without allowance for many costs which have become necessary to meet the demands for service placed upon the Association. However, with working cash at a low ebb and with additional programs in contemplation, it is obvious that services will have to be cut or dues increased if the costs of all services are to be met and reserve funds protected.

Members are urged to study the financial reports on another page of this issue in order to inform themselves on

the financial condition of the Association and its allied organizations.

5. California Medicine. The journal continues to occupy a high spot among state and regional medical journals in the country. Its editor and his assistants are constantly striving to produce the best possible publication with the material available and the advertising representative is well established in this field and expected to carry the journal to higher income levels. The fiscal year ended June 30, 1959, showed a slight increase in both advertising revenues and production costs. The advertising sales were slowed somewhat by changed merchandising programs of some advertisers and by a careful interpretation of advertising requirements by the Advertising Committee. New advertising rates went into effect on July 1, 1959, and their effect will start to be felt on January 1, 1960. Meanwhile, advertising volume, both in pages published and in financial income, has shown a decided upturn in the last half of calendar 1959. The year 1960 should establish new advertising records for California Medicine and bring the journal even closer to the point where it pays its own way completely, even without the allocation of subscription rates from members' dues.

6. *Annual Session.* At the time this report is prepared, arrangements for the 1960 Annual Session are being made. The Ambassador Hotel, Los Angeles, will again serve as the headquarters for the meeting and so far as possible all meetings will be held there. It will again be necessary to utilize some rooms in nearby hotels for reference committees and for a few other functions, solely for lack of space in the one hotel.

Exhibit space for the meeting has been completely allocated, unfortunately, with a number of exhibitors refused participation for lack of space. This is one of the penalties of increased growth of the Association; added demands for exhibits, for meetings and for other functions have surged ahead of the facilities in most California hotels and there is likely to be some inconvenience in fitting the demand to the supply. The C.M.A. staff must work with the available facilities and make the best possible arrangements under the circumstances. This has been done for the 1960 meeting but it should be pointed out that each new demand for committee or other services adds to the overall problem of providing adequate meeting space and consideration should be given to that fact.

7. *Staff Organization.* At the first of the year Mr. Howard Hassard assumed the position of Executive Director of the Association and inaugurated a program of correlating activities and programs with a view toward the most efficient coverage of all functions of the C.M.A. Under his direction a series of staff meetings have been held as a means of keeping all department executives advised of the entire program of the C.M.A., as a means of adding the thinking of additional personnel on specific problems and as a vehicle for solving the many interdepartmental problems that arise as an organization grows in size.

In addition, each staff executive has been assigned as a staff coordinator to each of the commissions and committees. As staff coordinator, the executive's function is to arrange for commission and committee meetings, to serve as coordinator and secretary at such meetings, to handle the preparation of minutes and to look after all the details that enter into all meetings. The coordinator is also expected to serve as a constant reminder to the commission or committee chairmen and members, to assure that each group fulfills its assigned duties and that all decisions of the House of Delegates and the Council are properly, adequately and timely carried out.

This system not only tends to assure the completion of assigned duties but also assures the commissions and committees of a regular assistant from the staff for the carrying out of such duties.

Under this arrangement, reports are forthcoming from all the commissions and committees and are available to all staff members for their continuing information and enlightenment. At the same time, each chairman knows that the physical and detail work for his group will be performed by a staff member known to him and given this responsibility.

The list of accomplishments under this setup is too long to be detailed here but the reports of the various commissions and committees will demonstrate the areas where staff personnel have contributed to official accomplishments.

As the tendency toward even greater efforts by the Association continues, with greater demands for additional services, it will doubtless be necessary to add more staff personnel to take care of the augmented needs. Fortunately, there are now enough experienced staff members available to make the training of additional personnel a relatively simple matter. It should be understood that a new staff executive, coming into medical work from a different field of endeavor, needs a period of seasoning and education before he can absorb the meaning of problems peculiar to this field. Where experienced personnel are present and able to devote even a little time to such training, the advent of a new member will require a minimum of training time.

There have also been developed a series of "guides" for members of the Council, of the House of Delegates and of commissions and committees. These are designed to lay down the basic rules under which these physicians will operate in their respective positions and to ease their introduction into a field of activity which may well be new to them.

Under development at this time are a series of personnel standards to guide the administration of C.M.A. staff members under current conditions of growth. These will relate to the conditions of employment, salary ranges and other working conditions which must be demonstrated to new staff personnel.

At the present time, the C.M.A. is employing a staff which is competent, willing and able to carry out all assigned functions. It is a pleasure to salute each staff member for devotion to duty, ability and the cooperative attitude so necessary for congenial and productive work.

Respectfully submitted,

John Hunton, *Executive Secretary*

REPORT OF LEGAL DEPARTMENT

To the President and the House of Delegates:

The Legal Department submits the following report covering the interval between the 1959 annual session in February and the time of the submission of this report.

There has been attendance at the annual session and at all meetings of the Council, various commissions, standing committees, special committees of the association as well as many committee hearings at the State Legislature; many reports have been prepared and submitted and many opinions given on a number of subjects, as requested by the Association, its officers and committees as well as its members and its component societies; several articles have also been written for California Medicine.

1. *Hospital Staff Membership.*

Questions are often presented to our office regarding the requirements for admitting a person to the staff of a public hospital and how far a staff may go in excluding one from having the privileges of using a hospital. A decision by the District Court of Appeal of the State of California in October, 1959, if allowed to stand, will have a most important impact on this question.

The plaintiff made application for staff membership to a hospital organized under the provisions of the local hospital district law. The Board of Directors of the District obtained a long history regarding the applicant which disclosed that he had performed several illegal abortions and his license had been revoked by the Board of Medical Examiners at various times. The Board rejected his application. He then commenced an action in the Superior Court for an order compelling the Board of Directors to accept him as a staff member. The Superior Court held that the Board of Directors was within its rights in rejecting his application and thus decided adversely to the applicant.

The plaintiff then took an appeal to the District Court of Appeal, and in this recent decision the decision of the Trial Court was reversed.

The Court pointed out that a licensed physician and surgeon does not have the right *per se* to practice in a *public* hospital, but that right is subject to reasonable rules and regulations. However, the Court points out that the mere fact that a physician and surgeon has had a history of past conduct which subjected him to disciplinary action by the Board of Medical Examiners is not reason in and of itself to deprive him of the right to practice in a public hospital. If he is to be excluded it must be for existing cause.

The District Court pointed out three things in reversing the Trial Court:

(a) Merely because a physician and surgeon has a past history of disciplinary proceedings is no reason to exclude him from the staff and in this case there was nothing in the record to show improper conduct on the applicant's part since the time he was disciplined.

(b) The standards for determining who should be on the staff of a public hospital should be set forth so that admission to the staff is not subject to the whim and caprice of the Directors.

(c) A person who is questioned regarding his ability to be on the staff of a public hospital is entitled to a public hearing on any charges made against him. (The Court does not point out the extent or nature of the public hearing.)

At this writing, the appeal is still pending and a petition for hearing is being filed in the Supreme Court.

2. *Legislative.*

During the first six months of 1959 the legislature was in session and a tremendous amount of time was necessarily devoted to the analysis of bills and amendments, advising the Committee on Legislation, appearances before committees and number of emergency decisions that must be made day by day while the legislature is acting upon literally thousands of bills. This year for the first time, due to the constitutional amendment by the people of the State of California, the legislature did not take a constitutional recess of thirty days, but remained in continuous session from January through June 19, 1959. The report of the Legislative Committee will no doubt go into much more detail as to legislative matters but we would like to point out in this report several of the bills passed by the Legislature pertaining to legal matters.

Several years ago in the legal report it was indicated that the volume of legislation grows year by year. This year again demonstrated that the 1959 legislative program was the heaviest ever experienced to date. There were some 526 measures that required continuous observation, since in one way or another they affected medicine.

One of the bills supported by the C.M.A. which was signed by the Governor and now is law, provides that no person licensed pursuant to the Medical Practice Act who in good faith renders emergency care at the scene of an emergency is to be liable for any civil damages as a result of any acts or omissions by such person in rendering such care.

Another bill which had failed to pass the 1957 Legislature but has now been signed and is law is a bill sponsored by C.M.A. relating to the confidentiality of records pertaining to special morbidity and mortality studies.

Also, an amendment was adopted by the Legislature and signed by the Governor that the prescribing of dangerous drugs without either a prior examination of the patient or a medical indication thereof, is to be considered unprofessional conduct within the meaning of the Medical Practice Act.

Many other bills will be considered in the report by the Committee on Legislation and the above are only mentioned as a matter of interest.

There are many interim committees established by the Legislature which will have to be followed and are at the present busily investigating subjects for further legislation. A number of the interim committees are of particular interest to medicine.

3. *Medical-Legal Relations.*

Continued efforts are being made with the C.M.A. and the State Bar continuing to establish medical expert panels in the various counties pursuant to the joint treaty which was agreed to with the C.M.A. and the State Bar. To date no statistics are available as to the effect of these panels which have been in operation in San Diego, Los Angeles and San Francisco, but it is anticipated that before long a report will be forthcoming in order that we may see the effectiveness of these expert panels.

4. *Miscellaneous.*

During the year we have appeared before a number of county medical societies to speak on various subjects, and have also appeared as guest speaker at a joint medical-legal meeting at Omaha and at the annual State Bar meeting of the Michigan State Bar.

Numerous other matters involving the Association have arisen during the past year. To enumerate them here would unduly lengthen this report. In addition to the writer of this report, Messrs. Alan L. Bonnington, Robert D. Huber, Salvatore Bossio and Ricky J. Curotto of our firm have devoted a great deal of time and effort to the legal affairs of the Association throughout the year. Much credit is due them.

It is a pleasure to be of service to the medical profession in California.

Respectfully submitted,

PEART, BARRITY & HASSARD
By: HOWARD HASSARD

REPORT OF THE COMMITTEE ON EMERGENCY ACTION

To the House of Delegates:

The Committee for Emergency Action consists of the President, the President-Elect, the Chairman of the Council and the Speaker of the House of Delegates. Its function is to study and make recommendations on items referred to it by the Council or matters of an emergency nature which demand decisions prior to the next Council meeting. The committee may also call upon consultants as deemed necessary.

During the past year the committee has met, in person or by conference telephone calls, on several occasions and its actions have been reported in the Council meeting minutes.

Obviously, a committee of this character must be maintained to handle matters requiring prompt action and I am sure I speak for all members of the committee in reporting that its existence has been most beneficial in expediting the business of the Association.

Respectfully submitted,

T. ERIC REYNOLDS, *Chairman*

REPORT OF THE COUNCIL

To the President and the House of Delegates:

The Council has met on nine occasions, one a two-day session, since the close of the 1959 House of Delegates meeting. In addition, the members attended the two-day Conference of County Society Officers held in Los Angeles on October 10 and 11.

In addition to its meetings, the Council has called upon various of its members to meet on other occasions for informal discussions and to serve with commissions and committees where they may provide a liaison between these groups and the Council.

Minutes of each Council meeting are reported in CALIFORNIA MEDICINE each month. In addition, copies of the minutes are sent to the presidents and secretaries of all county societies in draft form, so that these county officers may be aware of all Council proceedings and may ask questions, discuss items with their District Councilors or take such other actions as may be indicated from the prompt reporting of Council actions.

This report will not attempt to go into complete detail on the Council's activities during 1959 but will refer to the more important items which have come before the Council for consideration and decision during the year.

1. *Resolutions of 1959 House of Delegates.*

The 1959 House of Delegates adopted or referred to the Council a total of 24 resolutions which called for implementation. Some of these required only proper referral, under Council direction, to other bodies; others required discussion and consideration, prior to Council action, by one or another of the commissions and committees maintained to furnish special knowledge and techniques on the large variety of subjects which come before the Association in the course of each year. A brief listing of all such resolutions is given here; the greater part of the reporting on these items will be found in the reports of the various commissions and committees to which these items were referred.

Resolutions Nos. 35, 49, 50, 72 and 74 called for the attention of others to be called to House of Delegates decisions. These were handled by staff members under Council supervision.

Resolution No. 7 was referred to the Committee on Health Insurance. Resolutions Nos. 12, 13, 14, 15, 19 and 26 were referred to the Commission on Medical Services. Resolutions Nos. 17, 37, 53, 65 and 70 were referred to the Commission on Public Policy. Resolutions Nos. 29, 78 and 63 were referred to the Commission on Community Health Services.

One resolution, No. 27, was tabled as requiring no action. Resolution No. 35 was referred to the Committee on Other Professions, No. 45 to the Bureau of Research and Planning and No. 58 to the Committee on Postgraduate Activities.

The Council wishes once more to call the attention of members of the House of Delegates to the need for discretion in asking that proposed legislative actions be taken by the Commission on Public Policy. It is obvious that some proposals, while deemed desirable by the medical profession, may be contrary to the concept of the members of the State Legislature as to what constitutes sound public policy. In such cases it is imperative that the Commission on Public Policy be allowed adequate leeway in its operations so that the needs of the profession may be met but public policy not offended. It is suggested that a phrase such as "if feasible" be used where a resolution asks that specific legislation be introduced through legislative representatives.

2. *Bureau of Research and Planning.*

Under discussion at the time of the 1959 Annual Session was the creation of a Bureau of Research and Planning as a permanent part of the C.M.A. structure. The members of this bureau have been selected, under the chairmanship of Doctor Francis E. West, and the bureau has been proceeding with due caution during the year. Space has become available in the new headquarters office for a technical library. A librarian has been employed, a specialist in technical library work and in digesting and summarizing available literature on a given subject. This work is necessarily slow but it is gratifying to note that the source material for the library is being assembled and that digests have already been issued on subjects requested by the commissions for study. As time goes on, the volume and scope of reference material will increase and the services of the bureau will be expanded. The Council is anxious to see this work progress as rapidly as possible but is aware of the fact that this endeavor is new to the Association and must be approached with all due caution so that maximum results may be obtained and errors avoided. The Council is confident that this bureau and its library and reference facilities will become increasingly beneficial to the Association in the future.

3. *House of Delegates.*

The Council and its committees have given considerable thought in the past year to possible means of improving the effectiveness of the House of Delegates in its procedures and to other procedures for improving the overall operations of the Annual Sessions. Toward this end it has voted to hold the initial meeting of the House of Delegates on Saturday evening. At this meeting, all reports, special addresses and other preliminary matters will be taken up. The second meeting will be held Sunday morning, for the purpose of introducing new business; this meeting will doubtless adjourn at an early hour and permit reference committees to start their work and members to attend reference committee hearings or other functions.

The Council has also considered the request of the Committee on Scientific Work for a continuation of Annual Sessions in February of each year. This date appears to offer advantages in both the attendance of physicians and the choice of outstanding guest speakers for the scientific program. This matter will come before the 1960 House of Delegates.

A set of "Guides for Members of the House of Delegates" has been prepared by the staff and approved by the Council. This constitutes a brief review of the operations of the House and is intended to inform new members as to these procedures and to refresh the memories of those who have previously served in the House.

4. *Scientific Activities.*

During the past year it has become obvious that the Association is engaged in several programs which can be categorized as continuing medical education. These include the scientific program at Annual Sessions, the postgraduate institutes and circuits, support of cancer educational courses, cooperation with medical schools and cooperation with a number of agencies in the field of voluntary health organizations.

Some of these activities appear to overlap and some have been questioned as to their actual worth in either scientific or financial terms. The Council has determined to make a thorough study of this entire field so that adequate and proper planning may be made for the future. A special committee under the chairmanship of Doctor Dwight L. Wilbur has been appointed to undertake this task. The committee is expected to arrive at conclusions on the Association's proper place in the field of continuing medical education; from such conclusions an adequate program of C.M.A. scientific activities may be developed.

5. *Relative Value Studies.*

During 1959 the Council has been kept advised on the progress of the 1958 review of the original Relative Value Studies. The Commission on Medical Services continues its work on this project and the Council's prime responsibility lies in the field of the proper use of the results obtained. Toward this end, a problem arose during the year with respect to the fees to be paid by various departments of the State of California for medical care provided through state funds for designated beneficiaries. The analyst for the Legislature found that there was no uniformity between professional fees paid by several departments and has asked that the Association furnish factual material to achieve such uniformity. The Council has decided that the only such material available for this purpose is the current Relative Value Study and has asked each county society to permit the C.M.A. to make use of the coefficients obtained from them for their individual areas in discussing this problem with state officials. To date the response of the county societies has been most encouraging and it is hoped to be able to work out with the State of California a uniform table which will be realistic and in keeping with current fees for professional services.

6. *Liaison with State Agencies.*

For several years the Council has fostered cooperation and close working arrangements with a number of agencies of the State of California which enter into the field of medical care. Principal among these are the Department of Public Health, Department of Mental Hygiene and Department of Social Welfare. Each of these departments regularly sends its director or his representative to Council meetings, where they keep the Council advised on departmental affairs and furnish a close liaison between the C.M.A. and the state agencies. In addition, the Council is pleased to name special liaison committees with several departments of the state; such committees, notably the Liaison Committee to the State Department of Social Welfare, have been extremely valuable during the past year in effecting programs of mutual benefit.

7. *Financial.*

The past two years of C.M.A. operations have resulted in financial deficits totaling more than $90,000. Such deficits can be met only out of reserve funds. Reserves are held by the Trustees of the California Medical Association, a nonprofit corporation owned by the C.M.A., and the bulk of these reserves is invested in U. S. Treasury bonds which will not mature for another 10 to 12 years. Unfortunately, the market value on these securities has declined with the rise in inflationary influences, so that the sale of securities would result in a sizable financial loss.

In order to maintain reserve funds as well as possible, the Council has adopted several procedures for meeting all requests for additional funds. For one thing, the monthly financial reports prepared for the Council now show a separate column for the listing of appropriations voted by the Council in addition to the annual budget for the fiscal year. This report keeps members of Council constantly in mind of the financial aspects of programs approved by the Council between sessions of the House of Delegates. Along the same line, the Council now requires that any proposal brought before it which will require additional financing be referred to the Finance Committee, which must then make a written report on the proposal to the Council. This procedure assures a thorough financial review of all such programs and eliminates the possibility of hasty action prior to such review.

During 1959 the Council was required to recommend proper methods for financing the new headquarters building at 693 Sutter Street, San Francisco. The building was purchased for $325,000 and the installation of a new elevator and structural and maintenance changes required further funds. In addition, new equipment and furniture was required in some instances. The Council has carefully reviewed all these costs and believes today that the Association is well housed in suitable quarters which accommodate all present operations and allow room for future expansion. In the purchase of the building the Association, acting through the Trustees, took over a deed of trust loan amounting to about $104,000 and supplied the balance of the needed money through a bank loan. It is anticipated that the building itself will return sufficient surpluses to meet these loans and to amortize the total cost without recourse to selling securities at a loss.

In the line of finances, it should be pointed out that the Association has operated for a number of years without any increase in membership dues. For the current fiscal year, dues for 1960 were increased from $50 to $55 a member. As 1959 closes and a budget for 1960-1961 is in preparation, it appears that the Association is facing further increases in activities and programs, each of which will require additional personnel, overhead costs and operating budgets. Accordingly, it appears at this time that the dues will have to be increased for future years. It is the constant policy of the Council to budget as closely as possible to anticipated programs and costs. At the same time, it is obvious that a growing membership demands additional services and that these services must be paid for out of dues. The budget for 1960-1961 will be presented to the 1960 House of Delegates.

8. *Conference of County Officers.*

This year the Council approved an expansion of the annual conference of county society officers, augmenting the program to include a two-day session and providing for the attendance of three officers and two committee chairmen from each society. From reports received it appears that this conference was well received and that the attendance of more county society representatives makes for more adequate reporting in the county societies. It is the intent of the Council to continue planning this conference on a similar basis in the future.

9. *Federal Employees' Health Insurance.*

In September, 1959, Congress approved a bill to provide for the Federal Government to meet approximately one half the cost of health insurance programs for all federal employees. Each employee will have his choice of joining a program or not and a further choice of joining any one of four specified types of programs. Two of these types, namely, service (such as C.P.S.) and indemnity (such as commercial indemnity plans) are of especial interest to California physicians. In addition, federal employees may subscribe to closed-panel programs or to the more limited list of departmental plans which have existed for some years. The Council has voted to send a letter to each member of the Association, to outline the broad aspects of this program and to solicit the thinking of all members prior to the July 1, 1960, effective date for the program. The service-type program, to be sponsored by Blue Shield-Blue Cross, will be operative in those counties of California where the income ceiling is in line with the limits to be determined by the federal Civil Service Commission. These limits have not yet been announced but the service contracts to be used for federal employees in California must of necessity be geared to the standards to be adopted nationally. It is estimated that there are more federal employees in California than in any other state, including the District of Columbia. The number here is reported at about 300,000, or a total of about 700,000 persons when dependents are included.

The Council will see to it that the membership of the Association is kept advised of progress in this important program.

10. *Medical Care for the Aged.*

During 1959 the Council approved an offering to be made publicly by California Physicians' Service to individuals above the age of 65 years. This "MD-65" plan was prepared in response to a national demand for the availability of health insurance coverage for older citizens of limited financial means. The Association agreed to underwrite a part of the costs of this program in the event of unforeseen losses through claims payments. The offering was made for a limited period of time and a relatively small number of applications were received. To date this number has not been sufficient to provide sound actuarial experience and the Council has authorized C.P.S. to reopen the enrollment for an additional period so that this program may become more widespread and may accumulate factual experience data. It is recognized that this form of health insurance coverage has been limited in the past to relatively few people and it is hoped that an additional group underwritten through a new enrollment period may provide satisfactory statistical results to make further expansions possible in this field.

11. *C.M.A. Staff Structure.*

In late 1958 the Council appointed Mr. Howard Hassard as Executive Director of the Association on a part-time basis. He was charged with responsibility for coordinating all staff functions and planning for efficient staff organization. From time to time he has reported to the Council on the progress of this planning and the Council is convinced that this appointment will be extremely helpful in meeting the expanding needs of a growing organization in a time of significant changes in the practice and the economics of medical practice. Additional reports on the staff situation will be found in the staff report presented by the Executive Secretary.

12. *Supplemental Report.*

The Council will meet in January and February, 1960, prior to the convening of the 1960 House of Delegates. Further items developed in those meetings will be transmitted to the House of Delegates in a supplemental report. In addition, several proposed By-Law amendments to carry out the Council's policies will be introduced in the House at the appropriate time.

Respectfully submitted,

DONALD D. LUM, *Chairman*

REPORTS OF DISTRICT COUNCILORS

FIRST COUNCILOR DISTRICT

San Diego County

To the President and the House of Delegates:

I have attended all regular meetings of the Council since the last annual meeting. The minutes of the meetings have been recorded in CALIFORNIA MEDICINE.

In addition I have served on the Committee on State Medical Services, and as chairman of the division for Community Health Services of the Commission on Public Health and Public Agencies, and of the Committee on Allied Health Agencies. For a further report on these activities, see the sections on commission and committee reports.

The major part of my attention this year has been directed toward the care of the aged. I have served on the Council's Ad Hoc Committee on Aging as C.M.A. representative on the joint council to improve the health of the aged.

The year 1959 has again been a period of rapid growth in San Diego County Medical Society. The last official count was 876. Our 73 new members have found their place in our society with no great problem during the year.

Respectfully submitted,

JAMES C. MACLAGGAN, *Councilor, First District*

SECOND COUNCILOR DISTRICT

Imperial, Inyo, Mono, Orange, Riverside and San Bernardino Counties

To the President and the House of Delegates:

This district has shown keen interest in the socio-economic problems of medicine. Orange and San Bernardino counties have given a great deal of study to the Foundation Principle as a method to aid in the solution of the many problems associated with prepaid medical care problems.

The Bracero medical care problem in Imperial County has seemed to focus further attention on the part of organized medicine to this aspect of medical care. A solution has not been reached, but it can be emphatically stated that progress is being made.

Riverside County is presently engaged in a pilot study on the applicability of the usual fee service concept of prepaid medical insurance. To date the plan shows every indication of being successful.

The leadership in the county associations composing this district has been outstanding from the standpoint of using aggressive and intelligent approaches to their local problems. Frequent conferences are held between the officers of the county associations and the district councilor. While we believe the problem of communication between C.M.A. officers and committees with the local membership has improved, we continue to seek methods which will give us an even better informed membership.

Respectfully submitted,

OMER W. WHEELER, *Councilor, Second District*

THIRD COUNCILOR DISTRICT
Offices Nos. 1, 3, 4 and 6

Los Angeles County

To the President and the House of Delegates:

In the interval between meetings of the House of Delegates, the undersigned representatives from the Third District (Los Angeles County) submit the following "Progress Report" relative to district activities.

The year was initiated by considerable controversy over the advisability of establishing a county-wide panel of physicians who would be willing to agree to a predetermined fee for service. This panel, and its corporate controller, was designated as the Los Angeles Medical Plan. There was, and still is, considerable discussion ranging from reasonable to acrimonious, with resulting schisms within the society. The proponents of the plan, realizing that the establishing of such a plan on a county-wide basis was divisive to say the least, recommended that such plans if feasible at district level be formed where indicated or desirable but that there be no broad county-inaugurated plan.

A special meeting called for the opponents to any such plan resulted in a resolution passed overwhelmingly by those present, that there be no further activities on the part of L.A.C.M.A. officers or committees relative to the plan or anything similar to it.

We have been exposed to degrees of both favorable and unfavorable publicity in the local press, our best press com-

ing as a result of our medical activities, and our unfavorable publicity from our actions and lack of actions in the economics of the distribution of medical care. This in many instances was due to reportorial misunderstanding of our motives, and subsequent ventilation of these impressions in the public press. We must admit that our good intentions in protecting the public from inadequate insurance coverage have occasionally led to our being thought to be against all insurance. Our stand against the abusers of the public trust, by attempting to protect the many from the greed of a few, has sometimes resulted in the created impression that our profession as a whole is being adjudged guilty of the crimes of this few.

As councilors we have attempted to alert our members to the Forand Bill legislation for the coming year. Every one of our 17,000 doctors must contribute means as to how we can render medical care for our elder citizens in a realistic manner. An aggressive study must be undertaken with consideration of a paid-up health plan worked out, so that employees can make contributions during their earning power years.

We feel that more C.M.A. officers' socio-economic meetings, like the one held in Los Angeles in October, are desirable. It is necessary to get more and more pro and con arguments on controversial subjects.

We find our county society with a rather large vacuum created by the resignation of Doctor Edward C. Rosenow, Jr., to accept the position of executive director of the American College of Physicians. The resulting increase in responsibilities for the elected officers of the Association has not made for as efficient or as effective doctor relations. The transition in executive directors, however, was accomplished much more smoothly than anticipated, for Fred Field, our legal counsel, had been involved in nearly all of our activities and was able to take the baton on a protem basis with hardly any noticeable change of pace. His considerable knowledge of the workings of our organization, with a legal sense of its appropriate activities, has been most fortunate for us at this time.

Respectfully submitted,

GERALD W. SHAW, *Councilor,*
Third District, Office No. 6
ARTHUR A. KIRCHNER, *Councilor*
Third District, Office No. 4
J. NORMAN O'NEILL, *Councilor,*
Third District, Office No. 3
MALCOLM C. TODD, *Councilor,*
Third District, Office No. 1

THIRD COUNCILOR DISTRICT—Office No. 2

Los Angeles County

To the President and the House of Delegates:

It has been my pleasure to represent the district, and to work with the other members of the Council during the year. Much that is in the interest of both the profession and the public has come about as the result of the efforts of all concerned.

I have continued to serve on the Medical Review and Advisory Committee, as well as more recently on the Public Relations Committee. These are important assignments, and I have been impressed by the objectivity and the zeal of the members to do a good job.

Other personal activities have included an appearance on a panel in Salt Lake City, at a combined meeting of the American Bar Association and the American Medical Association, to talk on the Problems of Narcotic Addiction. The discussion and conclusions have brought many letters and requests; and, incidentally, as an outcome of this and other interests in narcotic problems, I appeared on the Paul Coates Program.

This has been released in many metropolitan areas, and the general reaction appears to be that the high record of rehabilitation of physicians addicted to narcotics may give encouragement to laymen to make the effort necessary to overcome their addiction.

The Queen for a Day Program, which goes to many millions of people nationally, has devoted a program each year to the project of nurse recruitment, and the audience has been composed of about 1,000 nurses in uniform. It has been one of the most popular programs of the year. It would appear that the results of this should bear fruit in stimulating nurse recruitment.

The philosophy of impartial medical experts in the field of both personal injury and malpractice, seems to be gaining ground. Paradoxically, during the year I appeared once as a plaintiff's witness and once as a defendant's witness in malpractice cases.

It was interesting to appear before legislative committees in Sacramento. The legislation sponsored by C.M.A. and L.A.C.M.A., wherein the prescribing of dangerous drugs without either medical indication for the drugs or without examining the patient would constitute unprofessional conduct, should do much to eliminate one source of these drugs which would eventually get into the hands of juveniles.

As a member of the Liaison Committee to the Department of Social Welfare, I have been impressed with the integrity and ability of these people. On the other hand, it is a perfect example of the foot-in-the-door technique, with the program being expanded in care to the totally disabled and, presumably, it will be expanded further. This may be meeting an unmet need, and it may not, since one is at times impressed with the tremendous expense involved in handling all this, and in feeling that these people were not dying in the streets before October 1957. It's not popular, I guess, to kick Santa Claus.

I continue to be impressed with the state officers and members of the Council, in that while a few are glued to the chair, most seem dedicated to the philosophy of attempting to do what is best for all physicians and not just presenting a preconceived point of view.

Respectfully submitted,

WILLIAM F. QUINN, *Councilor,*
Third District, Office No. 2

THIRD COUNCILOR DISTRICT—Office No. 4

Los Angeles County

To the President and the House of Delegates:

As a councilor from the Third Councilor District, Office No. 4, I have served faithfully by attending all meetings of the Council of the California Medical Association. I have participated as the chairman of the Welfare Commission with supervisory duties over the chairmen of the committees under this commission. In addition, I have been the chairman of the Medical Review and Advisory Board. We have held meetings regularly. There has been a liaison meeting with a similar committee of the California Hospital Association. I have been a member of the Insurance Committee and have aided in the development of a major medical insurance program, which has been offered to the counties that desire it.

Furthermore, I have served on an ad hoc committee of the Council which was created to develop the meeting of the Presidents and Secretaries of the California Medical

Association. Finally, I am also a member of the Committee on Committees and have served faithfully at its various meetings.

Respectfully submitted,

ARTHUR A. KIRCHNER, *Councilor,*
Third District, Office No. 4

THIRD COUNCILOR DISTRICT—Office No. 5

Los Angeles County

To the President and the House of Delegates:

The Third Councilor District covers all of Los Angeles County with its 7,500 members and the district is represented by six councilors, with each holding an "office." The County Medical Association is divided up into 16 district branches varying in size from 60 to 700 members, and actually each district branch can be compared with the county medical associations elsewhere in the state. During the year this councilor from District No. 3 visited many of these district branches.

The chief item of interest which occupied the time of the officers and members through the year revolved around the question of establishing a Foundation for Medical Care. This was known as the Los Angeles Medical Plan and popularly labeled LAMP. After considerable study in the various districts and communication through the County Medical Association journal the proposal was rejected at an open meeting of the membership. The chief objection centered around a fixed fee schedule and the formation of a foundation board of trustees with rather autocratic power which appeared to have too much influence on the private practitioner with his private patient. The need for the establishment of a foundation for medical care in the Third Councilor District did not seem too urgent other than along philosophical lines. Along with the LAMP proposal another companion document entitled "Criteria for Prepaid Medical Care" which had been adopted as a matter of policy without consulting the membership, was rescinded. This document placed an unnecessary burden on the Insurance Study Committee, which found itself with an overwhelming number of complaints to adjudicate from insurance companies against doctor members. This "Criteria" appeared to give the insurance industry the right to interfere between the doctor and his patient, and another part of the same document could be interpreted that the County Medical Association was injecting itself between the patient and the insurance company. Both the LAMP proposal and the Criteria were organized after tremendous effort of several committees, whose members are to be complimented on their diligent hard work. However, the proposals seemed to create more confusion, interference and problems than were necessary.

The principles of insurance involved in the above, centered around service type contracts and insurance on the indemnity principle. "Salesmanship" in favor of service type contracts and in favor of indemnity seemed to be heavy. Classically, each individual practitioner feels he should care for each individual patient separately without the interference of a third party. Whether such care can be accomplished by adopting a widespread acceptance of a service-type contract with set fees, or insurance on the indemnity principle, or neither, may require an answer.

This councilor feels that in the current discussion involving the new Federal Employees Health Insurance law the individual members of California Medical Association *must* be allowed to decide in matters concerning fee schedules, and that these should not be negotiated upon and decided by the Council. Also, salesmanship to promote a service type contract for the beneficiaries under this law with the exclusion of insurance by private carriers using the indemnity principle could be unwise. This councilor also feels, that every member of the Association must help make this decision because the profession must be united whether they shall have fee schedules and principles of practice decided for them under the service type contract or whether they insist on continuation as private practitioners who will want to use the indemnity principle of prepaid insurance.

Respectfully submitted,

JOSEPH P. O'CONNOR, *Councilor,*
Third District, Office No. 5

FOURTH COUNCILOR DISTRICT

San Luis Obispo, Santa Barbara and Ventura Counties

To the President and the House of Delegates:

It was with a sense of deep humility and a feeling of great honor and responsibility that I accepted in February, 1959 the nomination by the physicians of this tri-county area to serve as their councilor to succeed the very able Dr. Robert O. Pearman.

One of my first actions was to resign the chairmanship of the Community Health Committee (dealing with O.A.S.) for my local county society to avoid possible prejudice and conflicts with the actions and policies of the other two county societies I represent.

I have received a very warm welcome from all of the societies of this Fourth Councilor District. It has been my pleasure to be their guest speaker during the year and to attend their business meetings. It is my belief that all three societies are well organized, well informed on current problems, have very capable officers and the proper active committees.

It is my belief that lack of adequate communications is one of the areas of greatest weakness in organized medicine. For that reason I have faithfully made a complete written report to the president of each county society of my district concerning the monthly Council meetings of the California Medical Association. These reports have been long and detailed, but the expressions of appreciation from the component societies of this district have made me feel that the effort was valuable and gratefully received.

Perhaps fortunate, and certainly opportune, I have a special interest in insurance and prepaid medical care. I attended the Regional A.M.A. Conference in Portland on this subject in August. I also served on the committee for Prepaid Medical Care for the American Association of Medical Clinics. I was honored to attend and be appointed to write the committee's report for Prepaid Medical Care at the national convention of this association held in Chicago this past October.

Although this Fourth Councilor District has definitely not been under the severe pressure from third party influence comparable to the more heavily industrialized areas, our societies are prepared by committee work to meet this problem when it may occur. One of the milestones in this district was the action of the Ventura County Medical Society. This society in October of 1959 entered into the first negotiated contract in this district with major labor union welfare representatives for a plan to provide prepaid medical care for union members. The plan provides for a conversion unit of 5 on the California Relative Value Survey for all medical and surgical services and 5.75 for x-ray services. The fact that union representatives were delighted with the negotiation and that 100 per cent of the eligible membership of the Ventura County Medical Society voted for the plan appears most commendable for all concerned.

I am glad to report that this councilor has also received a very warm welcome from the president, general officers, heads of commissions and committees and other councilors

of the California Medical Association. The fact that the May meeting of the Council of the California Medical Association was held in Santa Barbara, the first time in C.M.A. history, was deeply appreciated.

In my council work I have advocated county medical society autonomy, the best possible communication between commissions, committees, general officers and councilors with the C.M.A. membership at large. I will continue to insist that the formal expressions of the assembled members of the House of Delegates be strictly pursued by the Council and appropriate committees of C.M.A. with the best possible efforts.

It must be understood that members of the Council of C.M.A. cannot always be in complete agreement on policy or methods of procedure, but intelligent debates by these earnest representatives most often will ultimately result in acceptable actions for the best interests of the majority of C.M.A. membership. I wish also to express herewith my personal admiration and respect for my colleagues.

In conclusion I am humbled in honor, deeply cognizant of the obligation of my councilor position, and grateful for the expressions of gratitude and trust. I pledge my continued best efforts to my constituents and to all members of the California Medical Association.

Respectfully submitted,

BYRON LEE GIFFORD, *Councilor,*
Fourth District

FIFTH COUNCILOR DISTRICT

Calaveras, Fresno, Kern, Kings, Madera, Mariposa, Merced, San Joaquin, Stanislaus, Tulare and Tuolumne Counties

To the President and the House of Delegates:

The main activity of the Fifth District during 1959 has been in the area of the Foundations for Medical Care. Foundations are now well established in Kern County, Fresno County, and San Joaquin County with cooperative enterprises involving Tulare County, Kings County, Merced County, Madera County, and Stanislaus County.

Particular credit should be given, not only to the doctors in these counties, but also to the energetic executive secretaries—Eldon Geisert, Roy Jensen, and Boyd Thompson.

I have attended the called meetings of the Council as well as those of the Medical Services Commission, Bureau of Research and Planning, and the Liaison Committee to the State Department of Social Welfare.

Respectfully submitted,

DONALD C. HARRINGTON, *Councilor,*
Fifth District

SIXTH COUNCILOR DISTRICT

San Benito, San Mateo, Santa Clara and Santa Cruz Counties

To the President and the House of Delegates:

The membership of the five counties comprising the Sixth District has maintained a great interest in problems of communication within the structure of the C.M.A.

These county societies have had many meetings pertaining to various aspects of the socio-politico-economic questions which confront medical practice today. The great challenge to provide satisfactory methods of financing for the ever-growing group of "Senior Citizens" has stimulated vigorous debate in all portions of the district.

As this report is submitted, there is much concern over the various alternatives for health benefits to be provided the federal employees. Two of these counties have approved the "C" schedule. The others are, at present, discussing the merits of such approval.

In the late fall the Palo Alto-Stanford Hospital (a joint community effort of the City of Palo Alto and Stanford University) was put into operation. The adjacent Stanford Medical School, with marked innovations in its teaching curriculum, enrolled its first students with the fall quarter. Communication problems between Santa Clara and San Mateo County Societies and the administration of the medical school continue to be of great interest both to faculty members and to practicing physicians in the area.

The Santa Clara and San Mateo County Societies jointly cooperated with the *Palo Alto Times* in the preparation of a special 24-page medical edition. The publication emphasized the tremendous assets present in the Mid-Peninsula area in the fields of medical facilities, medical personnel, medical research and medical education.

It is a very great pleasure to announce that the total membership in the Sixth District now exceeds 1,500 and that the district delegation will happily caucus to present the 1960 House of Delegates with their choice for a councilor to fill the second office from this district. (Los Angeles County please note.)

Respectfully submitted,

BURT L. DAVIS, *Councilor,*
Sixth District

SEVENTH COUNCILOR DISTRICT

Offices Nos. 1 and 2

San Francisco County

To the President and the House of Delegates:

As councilors from the Seventh District, we have reported alternately (since Dr. Campbell joined the Council in March as Seventh District's additional councilor) on the Council meetings to the San Francisco Medical Society's board of directors. Dr. Sherman served as vice-chairman of the Council, on its Finance Committee, and on the Liaison Committee to the State Social Welfare Board.

The major change of the year on the San Francisco medical scene was, of course, the move of Stanford School of Medicine to the Palo Alto campus.

The society has continued its deep interest in the problems of the chronically ill, and in the fall published the first list of nursing homes surveyed and approved by the Chronic Illness Committee. The society's Committee on Aging will work with the Chronic Illness Committee on the many problems affecting the city's high proportion of citizens over 65.

The expert witness panel has functioned effectively. As another phase of the "legal front," the Legal Liaison Committee worked with representatives of the local legal profession in forming an Inter-Professional Code for the physicians and attorneys of San Francisco.

Medical television has remained at the top of the society's public activities programs, and it was especially gratifying to have the Nevada Medical Society, after a lung surgery telecast, write the San Francisco group with an offer to publicize and help any future programs.

A study on the costs of practicing medicine in the community was instituted, and promises to be of immense future value.

The society's young physicians' program again welcomed, advised and assisted young doctors through a reception, half-day seminar, evening meetings and loans.

A joint cocktail party with the dental society and the respective auxiliaries carried on the project of maintaining liaison with other professions, and representatives of the pharmaceutical group met frequently with the Professional Liaison Committee.

Society members responded enthusiastically to a new life insurance program and a new supplement to the health and

accident group insurance. Other "firsts" were: formation of a section on aero-space medicine; publication of a well-documented, interesting, and handsomely bound society history; a series of seminars for claims personnel of companies that write workmen's compensation.

The outstanding "first" was the installation, at the annual "Change of Command" dinner, of the society's first woman president, Roberta Fenlon. All of San Francisco medicine is sure that the society's progress, in her small but capable hands, will be tremendous.

Respectfully submitted,

SAMUEL R. SHERMAN, *Councilor, Seventh District, Office No. 1*

DONALD M. CAMPBELL, *Councilor, Seventh District, Office No. 2*

EIGHTH COUNCILOR DISTRICT

Alameda and Contra Costa Counties

To the President and the House of Delegates:

The year 1959 was one of great activity and greater recognition for the Alameda-Contra Costa Medical Association, with emphasis upon a new life insurance program for the membership, a new contract for the Blood Bank, and the continued success of the Disaster, Adoption, Child Welfare, and Distribution of Medical Care committees.

The Doctors' Insurance Committee, with the assistance of an association-retained consultant, investigated numerous group life insurance programs, and after careful study initiated a plan for basic life insurance for all enrolling members, without evidence of insurability, including broad accidental death benefits, life insurance on dependents, and a supplemental life insurance program, for a minimal premium.

The Alameda-Contra Costa Medical Association Blood Bank recently completed negotiations with Alameda County to supply all its institutions with blood and blood products. It is expected that this move will result in a more economic and efficient distribution than in the past. During the past 12 months, the Poison Information Center, operating within the framework of the Blood Bank, received 2,773 inquiries from physicians seeking information regarding toxicity of ingested material—more than twice as many calls as in 1958.

The first Medical Disaster Planning Symposium of the Bay Area County Medical Societies, sponsored jointly by the Disaster Committee of the Alameda-Contra Costa Medical Association and the Committee on Civil Defense of the California Medical Association, was held at the Hotel Claremont in Berkeley. Sixty-two representatives from fifteen Northern California counties attended the symposium, which was a briefing session relating to the problems concerning the integration of medical personnel and resources that would be needed in event of a strategic evacuation resulting from a threat of total war. National recognition was made of past accomplishments of the Alameda-Contra Costa Medical Association Disaster Committee by the selection of its former chairman, Dr. Wayne Chesbro, to serve on the Council on National Defense of the American Medical Association. Additionally, Dr. Paul Slattery, committee vice-chairman, addressed the American Medical Association's Annual County Medical Societies Civil Defense Conference in Chicago in November describing the history of the Alameda-Contra Costa Medical Association's approach to the disaster problem.

Favorable comment was received from a number of medical societies on a series of articles prepared by the Adoption Committee and published in the Alameda-Contra Costa Association *Bulletin*. These have included a review of modern adoption concepts, the importance of physician advice, the agency vs. independent placement, and the legal aspects of adoption. The committee is preparing further articles on the subject, and it is anticipated that reprints of the entire series will be bound in booklet form.

Reports of the child injury study of the Child Welfare Committee, part of their continuing campaign to lessen childhood accidents, have been printed in CALIFORNIA MEDICINE and the *Journal of the American Medical Association*. The committee also met with school health personnel, and was well represented at the California Medical Association-sponsored Conference on Physicians and Schools in Berkeley.

Again this year, the Distribution of Medical Care Committees, responsible for review of fee complaints and questioned insurance claims, found the bulk of their work in reviewing insurance claims. The number of patient fee complaints dropped substantially, and the number of Blue Cross claims referred for review increased. Of 263 cases reviewed by the three committees, only 14 came from individual patients, the balance being referred by Blue Cross, California Physicians' Service, union welfare plans and other insurance carriers.

The Emergency Committee again sponsored a training program for ambulance stewards, drivers, and police and fire department personnel. Seventy-seven certificates were awarded at the completion of the course.

Two additional association-sponsored medical scholarships were awarded this year of $500 each, one to a medical student at the University of California, and one to a medical student at Stanford.

The Alameda-Contra Costa Medical Association lost its assistant executive secretary, Mr. William Dochterman, who left this association to become executive secretary to the Sacramento Medical Society. He was replaced by Mr. Jeffrey Blankfort.

According to the Credentials Committee, the membership reached 1,711 on October 31, 1959.

Respectfully submitted,

DONALD LUM, *Councilor, Eighth District*

NINTH COUNCILOR DISTRICT

Del Norte, Humboldt, Lake, Marin, Mendocino, Napa, Solano and Sonoma Counties

To the President and the House of Delegates:

This district has had repeatedly before it at various county levels the philosophy of an attitude and action concerning fee schedules, relative value lists and various methods of providing insurability against the cost of medical care. In some counties where labor has been particularly active, the direct challenge to medicine has been considerable, such as in Sonoma County. In other counties, this has not gained that degree of pressure and no particular incentive for special organization of these programs has existed.

The Ninth District was represented before the Interim Committee of the House of Delegates concerning the councilor districts. This district in general does not want to have itself divided transverse-wise into a north and half section to be connected to a district over in the valley. However, this district would look with favor upon any possibility of having two councilors from this area, not only for representation purposes but because of the great distances involved physically between the counties.

In the company of President-Elect Paul Foster, this councilor has now almost completed the regular meetings with the various component county societies. At the Mendocino-Lake meeting, which was the first one, the Auxiliary was present and the discussion following Doctor Foster's presentation was lively and his message was well received.

In the Humboldt-Del Norte County Society meeting, at which the Auxiliary did not attend, the general problems of organized medicine were presented and invitations for discussion from the floor were made. Exploration of the problems of the formation of foundations, discussions regarding fee schedules and also plans to contact and meet with Mr. Clem Miller, the U. S. representative from this district, were made. Dr. Kenneth Mooslin, the editor of the Humboldt County *Bulletin*, was particularly interested in these topics and was looking forward to participating in the meeting of county officers to be held in October.

At the Sonoma County meeting later, Doctor Foster met at noon with the Woman's Auxiliary and as is customary he and his party were very pleasantly escorted by the Auxiliary while awaiting the later evening meeting with the men of the society. Dr. Lucius Button had a reception at his home prior to the evening meeting in order to have an opportunity for Doctor Foster to meet and speak directly with many of the members of the society and particularly its various officers and committee men. That evening the full county society met and, after their nominations of the business meeting, heard Doctor Foster's address and asked questions thereafter. Recurrent questions concerned labor and medicine, fee schedules, doctors' independence, physician-patient relationships, etc.

In Napa County the meeting was very well organized and the questions to the point and informed. Doctor Foster made his basic address followed by a prolonged question period where the theme was basically upon the independence of physicians, the desire to work as private contractors, a certain degree of stress at the trends that are leading into fee schedules, and several observations to the effect that the California Medical Association, although perhaps intending to remain close to its membership, too frequently did not invite the opinion of the membership nor the best help particularly in formulating public relations. This meeting was very stimulating and thought provoking.

At the time of the submission of this report the meetings at the Solano County Medical Society and the Marin County Medical Society have not yet occurred. The Marin County Medical Society during this year has expressed an interest in forming some type of a foundation unit. Committees of that society meet regularly with a local union secretary and the board of directors of the society has instructed a committee to move ahead with a program for establishing a foundation.

All in all, it has been a good year for this district, the Ninth, and one in which the doctors seem to be steadily becoming more aware of the various facets of medicine's relationship to society and the trends that are molding and will change our profession. Your councilor believes that the total actions by the membership are rational, are occurring in a most democratic way and will lead to very important fundamental changes in medicine which if medicine participates in can be guided into worthwhile avenues.

Respectfully submitted,

WARREN L. BOSTICK, *Councilor,*
Ninth District

TENTH COUNCILOR DISTRICT

Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Yolo and Yuba Counties

To the President and the House of Delegates:

The medical affairs of the Tenth Councilor District of the California Medical Association remain well in order.

The councilor has made visits to nearly all of the component county societies. He has found the membership of each society well informed, interested, and active in California Medical Association programs. Most of the members and most of the societies are earnestly looking to the California Medical Association to provide leadership in the very difficult social and economic trends of the time, particularly with regard to federal intervention into the medical care of the aging population. They seem, however, to be disturbed at the relative lack of leadership, and the lack of a positive and dynamic program to which they can subscribe.

During the year several incidents have developed where smaller county societies in the district have felt themselves unable to discipline individual members who have violated principles of medical ethics or of good public relations. These situations are now slowly coming to solution as the doctors in each of these societies come to recognize their responsibility in supporting the pledge of the medical profession that it would discipline itself through its own organizations.

The councilor from the district has attended and been active in all council meetings. He has attended the annual convention and the House of Delegates meeting of the American Medical Association in Atlantic City. It is anticipated that the delegation and caucus from the Tenth Councilor District will continue to be very active in the study and recommendation of positive programs to the House of Delegates in its February, 1960 session in Los Angeles. Each of the delegates has come to feel that he is an essential functioning part of the legislative and executive activities of the California Medical Association and that he has a role of importance in the future development of the practice of medicine in California.

Respectfully submitted,

RALPH C. TEALL, *Councilor,*
Tenth District

REPORT OF CALIFORNIA PHYSICIANS' SERVICE

To the President and the House of Delegates:

This year, California Physicians' Service is beginning its 21st year of operation. Experience which we have gained in the first 20 years is proving to be of real value in solving some of the new problems with which we are now confronted. As our Board of Trustees faces new challenges, we keep in mind this principal objective which is stated in the foreword to the C.P.S. By-Laws.

> "C.P.S. is designed to provide Californians with a prepaid membership plan which will help them meet the major expenses of medical, surgical and hospital care. Further, it is designed to accomplish this aim while adhering to the principles necessary to preserve the standards of medical service and maintain proper physician-patient relationships."

In the eight months which have passed since my last report to the House of Delegates, C.P.S. has taken important action on a number of programs which affect the welfare of both the public and the medical profession. All actions were taken either at the request of or with the cooperation of various bodies of organized medicine in California.

MD Plan 65.

Immediately following the annual meeting of C.M.A. in February 1959, C.P.S. undertook to offer the plan which was unanimously approved by the House of Delegates. Necessary reserves were established for the new plan, a contract was drafted and dues were set on the basis of the reduced fees which were unanimously voted by the House of Delegates. While new operating procedures were being developed for

handling the program, necessary promotion plans and literature were designed.

Aim of the Board was to enroll a limited, but representative, group as a trial. Enrollment in MD Plan 65 was set for the month of June. Newspapers throughout the State carried articles on announcement day and advertising was run in 36 daily papers.

A satisfactory number of persons enrolled to enable C.P.S. to gain experience. It is believed that more would have enrolled if hospitalization could have been provided, but C.P.S. could not offer those benefits at a reduced cost. Also, many persons 65 and over had signed for one of three insurance plans which already had been offered. Of those enrolled, the median age was 72 and 13 per cent were 80 years or older. More men than women signed up. Since there is a six-month waiting period for pre-existing illnesses for which the patient had received treatment during the six months before July 1, 1959, it is still too early to determine experience with the plan. Even so, it is felt that public and legislative reaction has been favorable and that this experimental program will prove to be of great value in the years ahead.

Riverside Plan.

Last June, at the request of the Riverside County Medical Society, C.P.S. offered a new full-service contract regardless of family income. In this plan, C.P.S. pays fees as billed by the physician so long as they represent the usual and customary fee which the doctor is paid by his regular private patients. A society review committee (composed of the executive committee) makes the sole determination concerning any questioned fees.

The first group signed under this new contract was the Food Machinery Corporation with 500 employees. Other smaller groups have been signed in the past few months as this new approach is being carefully studied to determine its ultimate effectiveness and financial stability.

"C" Schedule Promotion.

In mid-February, C.P.S., with the approval of the Los Angeles County Medical Association and Orange County Medical Society, began promotion of the "C" Schedule in conjunction with a $7,200 income. This was advertised as the "fp" plan, and new prospective groups were advised to "see their insurance broker." (C.P.S. Board of Trustees authorized the payment of commission to brokers on groups of ten or more members in January, 1959.)

The combination of the new $7,200 plan benefits and availability of the plan through brokers has proven to be most successful in Los Angeles and Orange counties.

During the summer months, similar promotions have been carried on in Sacramento, Alameda-Contra Costa and Monterey counties at the request or approval of each society.

Brokers to Sell Individual Plan.

Following the success achieved in paying commissions to brokers for sales of C.P.S. contracts to new groups, the Board of Trustees has authorized a similar arrangement to apply to the sales of a new individual plan which is being developed for this purpose. It is being offered first through those brokers who are already selling C.P.S. contracts to groups, and those who in past years have expressed an interest by recommending the C.P.S. Individual Family Plan to their clients. The need to make a personal contract *and* contract with each broker will necessarily limit the number of brokers who will sell the contract initially. The list will be expanded as required.

Foundation Plans.

Ever since 1954, C.P.S. has been working with San Joaquin County Foundation in bidding on groups which have chosen to have a Foundation Plan. Coincident with the establishment of Foundations in Fresno and Kern counties, C.P.S. has been active in offering its full line of contracts applied to fee schedules which are based upon the C.M.A. Relative Value Study. In addition, it has worked jointly with these Foundations in the processing of claims.

Federal Employees Health Plan.

In late September, President Eisenhower signed Senate Bill 2162 which provides for a health plan for federal employees with contributions toward the cost to be paid by the Government.

There are approximately 230,000 federal employees in California (nearly half of whom do not now have any plan at all). C.P.S. has 13,000 such employees covered now. The bill called for each employee to be able to select from:

- Two National Blue Cross-Blue Shield Plans, one with a high level of benefits and one with a low level.
- Two National Indemnity programs, one with a high level of benefits, and one with a low level.
- Existing Association (Union) Plan.
- Closed Panel Plan (to be negotiated on a local basis).

Blue Cross and Blue Shield are already at work jointly to ensure that when the time comes for individual selection of a plan by each federal employee next May, the special advantages of the Blue Cross-Blue Shield service plans will be well known.

Two-Unit Deductible Contract.

The Board is considering carrying out an experiment in one county to determine the success of a two-unit deductible outpatient medical contract.

Diagnostic Hospital Admissions.

At the request of the Board of Trustees, the C.P.S. staff is making a statistical study of diagnostic admissions to the hospital. The purpose is to determine costs and the effect of co-insurance on hospital benefits. This information can also be used in studying the extension of outpatient diagnostic benefits as a means of cutting down on unnecessary hospital utilization.

Tray Fees in Doctors' Offices.

In line with Resolution No. 32 passed at the C.M.A. House of Delegates meeting last February, the Board of Trustees has authorized payment of a tray fee when suturing is performed in doctors' offices as follows:

(a) One unit will be paid on Fee Schedule C for procedures where suturing is involved.

(b) Under Fee Schedules A and B, payment for the same procedures will be equivalent to one office visit.

New Board of Trustees Member.

At the July meeting of the Board of Trustees, Mr. Arthur L. Dahl of Carmel, Investment Counselor, was elected to fill the vacancy created by the resignation of Mr. Guy W. Wadsworth, Jr.

California Physicians' Insurance Corporation.

This corporation, a wholly owned subsidiary of C.P.S., has continued to show healthy progress since the last meeting of the House of Delegates. Both membership and monthly income have nearly tripled since last February on the base plan policies. In addition to this, 20,000 employees are now covered by seven major medical policies. Total monthly premium income for all policies is nearly $100,000.

Principal future growth appears to be in providing major medical over C.P.S. base plans. It is also expected that there will be greater activity in providing indemnity-type hospital

benefits which will be substituted for full service in some C.P.S. contracts.

Reduction of Administrative Costs.

Since February, a job evaluation program has resulted in reassignment of staff duties, which has brought about savings that will amount to some $400,000 a year. Study is continuing on further use of automation and centralization with the aim of further reducing operating costs.

The foregoing progress report should indicate rather clearly that California Physicians' Service is alert to present trends and is actively engaged in constructive steps which will meet the needs of both its subscribing members and the medical profession.

Respectfully submitted,

ARLO A. MORRISON, *Chairman*
Board of Trustees

REPORTS OF COMMISSIONS

CANCER COMMISSION

To the President and the House of Delegates:

This report covers the activities of the Cancer Commission for the year 1958-59.

There have been two meetings of the Commission and two meetings of the Executive Committee during this report period. Activities may be summarized in the following categories:

1. *Cancer Quackery.* As in the past, the Commission has concerned itself with the problem of cancer quackery. On June 5, 1959 Governor Edmund Brown signed into law Senate Bill No. 194, commonly referred to as the "Cancer Quack Bill." California is the first state to have specific legislation to deal with the cancer quack problem. The American Medical Association, at its meeting in June, cognizant of this, adopted a resolution complimenting the State Legislature and the Governor and urging other states to do likewise if a cancer quack problem existed in their states.

At this writing the Governor has not appointed the members of the Cancer Advisory Council, but it is anticipated that several members of the Cancer Commission will be included. In any event, the Cancer Commission will render full cooperation to the State Department of Public Health in administering the provisions of the act.

We take this opportunity to express our sincere appreciation to Doctor Dan Kilroy, Mr. Ben Read and Mr. Gene Salisbury for the part they played in bringing this legislation to a successful conclusion. We would also like to express our appreciation to the American Cancer Society, California Division, for the assistance that it gave in this endeavor. And last but far from least, our thanks and appreciation to the California Osteopathic Association.

During the past year the brochure entitled "Unproved Cancer Treatment Methods" has been revised and reprinted and distributed to all members of the California Medical Association. Copies of this brochure are available in the office of the Medical Director.

The commission continues to cooperate with the Bureau of Food and Drug Inspections of the California State Public Health Department in their effort to curb cancer quackery.

The medical director met with the Cancer Commission of the Nevada State Medical Society to assist them in preparing anti-cancer quack legislation which they hope to introduce at the next session of their State legislature. Except for minor details, the legislation will be identical with that currently in effect here in California.

Several other states have corresponded with the Cancer Commission concerning this matter, and it appears that several states are considering seriously the introduction of similar legislation within the near future.

2. *Consultative Tumor Boards.* Official action of the commission resulted in granting full approval to fifty-two tumor boards and provisional approval to sixteen. A few new tumor boards were activated during the year and will soon be considered by the Cancer Commission for approval.

It is of interest to note that forty-five of the approved tumor boards received financial assistance from the California Division of the American Cancer Society in a total amount of over $79,000 during the fiscal year 1958-59.

The Minimum Standards for Consultative Tumor Boards have been revised and are now at the printer. They will be distributed to the appropriate individuals within the near future.

3. *Cancer Conferences.* Twelve cancer conferences were conducted during the year for county medical societies, which represents a decrease from last year.

It is hoped that our activity in this field can be increased during the coming year by instituting a program to involve the various chapters of the California Academy of General Practice. Invitations have gone out to the chapters inviting them to avail themselves of our program.

The caliber of the meetings conducted remains high and the speakers who contribute their time and effort to this project deserve our sincere thanks.

4. *Tumor Tissue Registry and Pathology Slide Conferences.* The registry continues to be very active under the guidance of Frank Dutra, M.D., of Castro Valley as chairman, and Weldon Bullock, M.D., of Los Angeles as registrar.

As in the past, two tissue slide conferences were held—one, as a pre-convention conference and one, as a midyear conference. Both conferences were well attended and both maintained their high caliber of scientific presentations.

The senior study groups continue to be active and hold monthly meetings to review the material submitted to the registry. The junior study groups are also active and contribute significantly to the activities of the Tumor Tissue Registry.

The California Medical Association can feel justly proud of the Tumor Tissue Registry for its major contribution to the problem of cancer control in California.

5. *Annual Pre-Convention Radiology Conference.* The conference this year will be conducted under the chairmanship of Doctor Merrell A. Sisson of San Francisco. As in the past, both therapeutic and diagnostic problems will be discussed and a worthwhile program is anticipated.

6. *Central Tumor Registry, California Department of Public Health.* The Advisory Committee to the Central Tumor Registry continues to be active. During the year a study has been completed to verify the data in the registry as to the diagnosis of carcinoma of the breast. This study is to be published in one of the national journals at an early date. The Cancer Commission feels that this is a most significant study and wishes to commend the staff of the Central Tumor Registry for making it possible.

At the present time there are thirty-seven voluntarily participating hospitals in the California Tumor Registry. It is estimated that this represents about 33 per cent of the total cancer hospital admission in the state. Expansion of this program to include other hospitals is not possible at this time because of the lack of necessary funds. Additional state funds are desirable to make it possible for more California hospitals to participate in the worthwhile project. The marked progress, for example, that has been made in follow-up since 1950 from 88 per cent to 93 per cent is worthy of note.

7. *American Cancer Society, California Division.* The Cancer Commission through its medical director continues to be

active in directing the medical and scientific programs of the California Division and in rendering consultation to the division in matters pertaining to the medical profession. Nine members from the Cancer Commission and its Advisory Committee are serving on the board of directors of the California Division. The remaining twenty-one doctors of medicine on the Society's Board are members of the California Medical Association, but have no official status with the Cancer Commission. This is in contrast to the situation in 1945-46 at which time the California Division was organized under leadership of the California Medical Association through its Cancer Commission, and at which time the nine members of the Cancer Commission constituted all professional directors on a total directorate of fifteen members. Increase in size of the society's board incident to expansion in the intervening years has resulted in dilution of the role of the Cancer Commission, although an equal balance has been maintained between doctors and medicine and lay individuals. Subsequently, it will be recommended that the Advisory Committee of the Cancer Commission, appointed annually, be increased from nine to sixteen in order to provide places for and to identify with the commission certain professional directors on the society's board. This will be done on a selective basis in a manner to best serve the interests of the C.M.A. and to reverse the trend toward dilution of the commission in its function to provide leadership in the medical phase of the society's program.

Several C.M.A. members, not presently members of the Cancer Commission or its Advisory Committee, hold important positions on various standing committees of the California Division, thus enhancing medical guidance to the activities of the division. To date, this has been generally satisfactory although these members have not had direct participation in meetings and policy discussions of the Commission.

Negotiations are currently under way with the California Division to make available additional staff personnel to adequately carry out the increasing programs of the Cancer Commission and the California Division. (A joint meeting between the Executive Committee of the Cancer Commission and the officers of the California Division has already been held and a subsequent meeting has been planned for the near future.)

In conclusion, the chairman wishes to express his appreciation to the other members of the Cancer Commission and the members of the Advisory Committee for their diligent efforts and support, without which it would be impossible to report substantial progress.

Respectfully submitted,

DAVID A. WOOD, *Chairman*
Cancer Commission

COMMISSION ON COMMUNITY HEALTH SERVICES

To the President and the House of Delegates:

This commission has had only one meeting this year. It met in April to resolve discrepancies in two resolutions on cytology passed by the House of Delegates.

Other activities included addition of a subcommittee on traffic safety that met with the Governor's Traffic Safety Council. This committee should be made a standing committee at this year's general meeting. The commission also sent representatives to the Governor's Conference on Children and Youth at Asilomar. This activity will be continued during 1960 with attendance at the White House conference on Children and Youth.

Respectfully submitted,

JAMES C. MACLAGGAN, *Chairman*
Commission on Community Health Services

Committee on Allied Health Agencies

To the President and the House of Delegates:

The Committee on Allied Health Agencies has had one meeting during the current year.

The committee received a report from Doctor Sidney Shipman concerning the activities of the A.M.A. Committee on Allied Health Agencies. Doctor Shipman informed the committee that the A.M.A. would have a brochure ready for distribution within the next few months, listing all of the voluntary health agencies and a brief description of their activities. When this brochure is ready, it will be made available to the county medical societies.

The matter of Health Foundations being organized under the leadership of United Community Funds and Councils of America was discussed in some detail, and it is the recommendation of the committee that when a county medical society is asked to participate in a Health Foundation, advice in this matter be obtained from the Committee on Allied Health Agencies.

The committee continues to work on the preparation of a suitable guide for county medical societies to assist them in their relationship with the voluntary health agencies in their communities. It is anticipated that this guide will be ready for distribution within the near future.

The committee is planning a series of meetings with representatives of state voluntary health agencies to discuss mutual problems of interest and to explore avenues of mutual assistance in the carrying out of the official programs of the agencies.

During the year the committee has received from the National Information Bureau a rather complete cataloging of national voluntary health agencies including a detailed description of their programs. This information is available to any county medical society having a need for such information.

It is anticipated that the activities of this committee will be increased during the coming year.

Respectfully submitted,

JAMES C. MACLAGGAN, *Chairman*
Committee on Allied Health Agencies

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Committee on Blood Banks

To the President and the House of Delegates:

The committee is happy to report that all banks within the California system have complied with the standards adopted by the Council in January, 1958.

The committee has under consideration the problems posed by the need of state hospitals and institutions for blood and the replacement difficulties.

Respectfully submitted,

ANDREW M. HENDERSON, JR., *Chairman*
Committee on Blood Banks

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Committee on Civil Defense and Disaster

To the President and the House of Delegates:

The Committee on Civil Defense and Disaster is made up of the following physicians: Frank F. Schade, Los Angeles; Justin J. Stein, Chairman, Los Angeles, and Wayne P. Chesbro, Berkeley.

Governor Edmund P. Brown reappointed all three members to the Governor's Emergency Medical Advisory Committee and reappointed Justin J. Stein as chairman of this committee. This is most fortunate because it assures leadership and top level planning to the members of the organized medical profession in all state disaster medical planning.

All three members of the California Medical Association committee are active in local, state, American Medical Association, and governmental disaster preparations and planning.

Probably the best test exercise ever held in this country was carried out on June 20, 1958, in Alameda and Contra Costa counties in California on the assumption that a major earthquake had occurred. Some 3,000 persons took an active part and all twenty-four hospitals located in the two-county area, as well as representatives from civil defense and volunteer agencies participated. Within a twenty-four hour period 2,100 persons with simulated injuries had been collected at a dozen collecting and assorting stations, had been given first aid, loaded into various types of vehicles and delivered to hospitals where definite medical treatment could be carried out. Dr. Wayne Chesbro, a member of the California Medical Association committee, deserves much credit for his work in helping plan this test exercise.

On May 16, 1959, a Medical Disaster Planning Symposium for the Bay area county medical societies was sponsored by this committee and the Alameda-Contra Costa Medical Association Disaster Committee. It is planned to have meetings similar to this one annually in Northern and Southern California. This meeting was a most successful and informative one.

It is also planned to have a resolution submitted to the House of Delegates in February 1960 to change the name of this committee to the Committee on Disaster Medical Care. This is a more appropriate title and conforms to the A.M.A. designation of its committee.

Stockpiling of medical supplies continues in this state. There will be 130 Civil Defense Hospitals (200 beds) stored in this state by November 1, 1959. Twenty of this number are owned outright by the state and the remainder can be committed to use by the appropriate federal authority. They will be of great help during any major disaster.

For the first time, a symposium on disaster medical care will be held during the next annual session of the California Medical Association. It is hoped to make this an annual affair.

Much remains to be done and the members of this committee are always willing to do what they can to advance medical disaster care preparations.

Respectfully submitted,

JUSTIN J. STEIN, *Chairman*
Committee on Civil Defense and Disaster

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Committee on Community and Rural Health

To the President and the House of Delegates:

Your committee again this year coordinated its efforts with the various organizations making up the California Council on Rural Health.

Members of the committee with the assistance of Doctor Batchelder and Mr. Marvin of the C.M.A. staff played an active part in the planning and conduction of the annual conference on Rural Health which was held this year in Fresno. Although this conference was well planned and organized it was our feeling, at its conclusion, that it had not succeeded too well in carrying out its functions of disseminating information on rural health problems and acting as a medium for the exchange of ideas or problems. It was therefore concluded that in the future our efforts in this direction might be more productive if spent either on a county or regional level with more emphasis on the problems which properly are within medicine's realm.

During the latter part of the year the committee has undertaken a study of the problems of the agricultural workers with particular interest in the foreign workers or "braceros." This is a vast and important field and will be of prime importance to your committee in the ensuing months. A member of the committee has been appointed to the Governor's Advisory Committee on Migrant Workers. We have also maintained close liaison with the State Department of Public Health, the Farm Bureau and other organizations interested in the health of the migrant worker.

Respectfully submitted,

ROBB SMITH, *Chairman*
Committee on Community and Rural Health

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Committee on Industrial Health

To the President and the House of Delegates:

The Committee on Industrial Health has not held a full formal meeting subsequent to the last report and the last annual meeting of C.M.A.

The completed work of the Subcommittee for the Standardization of Joint Measurements in Industrial Cases, Dr. Packard Thurber, Sr., chairman, is still in the hands of the publisher. Further revisions have postponed completion of this publication, however, it is probable that this book will be available early in 1960.

This subcommittee continues to believe that its next most important function is to get medical schools to teach this standard method to students and plan to pursue this endeavor further after the revised edition is available.

Your chairman attended and participated in the meeting of Chairmen of Industrial Health Committees, State Medical Associations, in Cincinnati, February 16, 1959. This was held the day prior to the Annual Congress on Industrial Health (Council on Industrial Health, A.M.A.).

The Third Western Industrial Health Conference was held in Los Angeles, October 2 and 3, 1959. Several members on this committee actively participated in this conference.

This committee continues to be active directly and indirectly in developing and participating in various Industrial Health Conferences locally, state-wide and nationally.

Orientation of Senior Medical Students with Industrial Medical Problems and Summer Vacation Plant Indocrination for the summer preceding the medical student's senior year has continued (U.C.L.A.). This committee favors furtherance of this endeavor.

Although no study has been completed, nor recommendations made, preliminary "spade work" was started on development of a suitable check list to indicate more clearly specific limitations of an injured employee on his return to work. To all intents and purposes, this was an effort on the part of Dr. A. C. Remington (deceased).

Respectfully submitted,

JEROME W. SHILLING, *Chairman*
Committee on Industrial Health

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Committee on School Health

To the President and the House of Delegates:

The past year has been a particularly active one for the School Health Committee. In past years, the C.M.A. has sponsored Physician-School Conferences which have been very successful in stimulating educators and physicians in the development of school health programs. This year two conferences were sponsored with the cooperation of the California School Administrators' Associations. In addition, the committee began its study of the health of school personnel, and also considered the provision of medical care to students of the state colleges.

The Physicians and Schools Conferences this year were organized so as to obtain the maximum participation of physicians and school administrators. Conferences were held at Riverside and Berkeley so as to make them more accessible to the participants. The programs were identical and chiefly concerned with improving communication between the schools and the physicians and the health of school personnel. In addition, the California Chapter of the American Cancer Society presented the results of teenage smoking habits as revealed in a survey done in Portland, Oregon. They also outlined their objectives in launching a health education program at the secondary school level so as to present to the students of these grade levels the facts about smoking as it relates to cancer. The participants were most enthusiastic in their comments concerning the conferences and it is the committee's belief and hope that greater understanding resulted from them.

At the present time the School Health Committee is working with the California Teachers' Association on the development of standards and policies in the health of school personnel. This project is just getting underway and should lead to a rather exhaustive study of the whole subject.

With the rapid growth of the state colleges, the medical care of the students has come under scrutiny. It is generally agreed that infirmary care is a direct responsibility of the school, so that the point of discussion concerns medical care which involves more than just convalescent treatment. In two state colleges a health insurance plan is in operation through the C.P.S. on a trial basis. Whether this is a practical answer to the problem needs further study, and the School Health Committee intends to remain active and interested in this development.

The committee chairman, along with Mr. Robert Marvin, represented the C.M.A. at the National Physicians and Schools Conference in Highland Park, Illinois. This was sponsored by the A.M.A. and proved to be a most stimulating and informative meeting, discussing some very timely school health problems.

The committee has before it several other school health matters which are of immediate concern and, within the limitations of time, hopes to consider these during the coming year.

Respectfully submitted,

CHARLES A. BRANTHAVER, *Chairman*
Committee on School Health

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Committee on Traffic Safety

To the President and the House of Delegates:

On May 9 and 10 the Council of the California Medical Association appointed an Ad Hoc Committee to participate in the 1959 Governor's Traffic Safety Conference and to make recommendations regarding the role of the C.M.A. in traffic safety programs.

The following recommendations are submitted:

1. It is recommended that the C.M.A. request the various medical societies to provide a group of doctors that the Motor Licensing Bureau can call upon, to make recommendations concerning problem drivers.

It is suggested that this group include, wherein possible, an internist, a psychiatrist, a neurosurgeon and a general practitioner.

2. It is recommended that the Traffic Safety Section of the California Medical Association be perpetuated.

3. It is recommended that the groups in the various medical societies be polled at the end of approximately six months period of time, regarding recommendation for examination for driver licensing throughout the state and that these recommendations be broken into two groups: (1) commercial drivers; (2) private drivers.

4. It is recommended that ophthalmologists, internists and psychiatrists be polled regarding their opinions concerning driver licensing requirements and when licenses should be revoked.

The combined recommendations from the specific interested groups, plus the various medical societies should then be consolidated for final recommendation.

5. I believe that the chairman for the C.M.A. on traffic safety should vary from year to year, depending upon the principal need for improvement in that year, such as an ophthalmologist to approve the visual standards or a psychiatrist whose concern would be in changing attitudes and so forth.

I do believe the principal orthopedic contributions have been made.

Respectfully submitted,

C. K. BARTA, *Chairman*
Committee on Traffic Safety

COMMISSION ON MEDICAL EDUCATION

To the President and the House of Delegates:

The Commission on Medical Education has attempted to correlate the continuing education activities of the Association as far as possible. The reports of committees serving under the commission are self-explanatory.

Respectfully submitted,

ALBERT C. DANIELS, *Chairman*
Commission on Medical Education

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Committee on Maternal and Child Care

To the President and the House of Delegates:

The Committee on Maternal and Child Care met three times during 1959. The report will be divided into two parts: maternal mortality and infant mortality.

Maternal Mortality. A great deal of progress and accomplishment has occurred during the past year. Two changes have occurred in certain state laws: First, the State Legislature repealed Section 10200 of the California Health and Safety code. This law, in effect since January 1, 1956, required that footprints of all newborn infants, and fingerprints of the mother be affixed on the reverse side of the certificate of live birth. The repeal of this law becomes effective September 18, 1959. On and after that date neither mothers' nor infants' prints should be made on the official birth record. However, the same certificate of live birth form will continue in use until further notice from the state.

Second, Assembly Bill No. 595 passed the State Assembly and Senate and was signed by the Governor.

Since inception of the maternal mortality investigations on August 1, 1959, a total of 310 maternal death certificates have been received and 194 of these case studies completed. The remainder are in the process of study and statistical analysis.

Arrangements have been made for an exhibit at the annual session. All members are invited to view it. Plans have also been made for a symposium on maternal mortality. This will be a joint meeting of the sections of general practice, pediatrics, public health and obstetrics and gynecology. At this meeting, Dr. Theodore Montgomery of the State Department of Public Health will explain the entire program of maternal and infant mortality studies. Following this a selected panel will discuss two maternal deaths to demonstrate the workings of a routine maternal mortality investigation.

During the year a final questionnaire sheet was selected; also suitable coding sheets for the purpose of statistical analysis. Refinements in the method of operation have been made. The program has been working very smoothly and progressing very satisfactorily. An attempt will be made to secure a complete set of pathological slides on every maternal death if these are available and these slides will be stored for any future studies. Plans for the proper storage of maternal mortality case reports and for slides are being studied. It is very apparent that there will be future need for exchange of information between various state maternal mortality study programs.

Plans are also being made through a publicity and editorial committee to properly disseminate information and the results of the findings of this committee. Such studies and case reports are of great value as teaching cases.

Infant Mortality. The State Committee on Perinatal Mortality has been changed to Subcommittee on Infant Mortality. Infants are defined as up to one year of age. Dr. Robert Chinnock of Los Angeles heads this subcommittee. This committee is continuing to attempt to interest physicians in the problem of perinatal mortality. All county infant mortality chairmen will be invited to a luncheon to be held during the annual session. Dr. Chinnock will explain the anticipated program to this group. It is apparent that the best way to proceed in the study of infant deaths is through a properly functioning local hospital committee. It is only at this hospital level and with the aid of good records and complete autopsy reports that any intelligent progress can be made.

To further stimulate interest in this program, a panel discussion on perinatal mortality will also be held on Wednesday, February 24. This panel will discuss two infant deaths and will demonstrate the workings of a typical hospital committee on infant mortality.

Now that Assembly Bill No. 595 has been passed, it is anticipated that some special problem relative to infant mortality will be studied during the next year. The subject of hemolytic disease of the newborn and the rising death rate of negro babies have been suggested as topics. Such study will be further discussed after approval of the Council of the C.M.A. and upon provision of suitable funds.

The committee has also been in correspondence with the Committee on Maternal and Child Care of the American Medical Association. It is anticipated that a regional conference on perinatal mortality sponsored by the A.M.A. will be held in California in 1960 to further stimulate interest in this program.

Respectfully submitted,

JAMES W. RAVENSCROFT, *Chairman*
Committee on Maternal and Child Care

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Committee on Postgraduate Activities

To the President and the House of Delegates:

During the past year your Committee on Postgraduate Activities has continued the program underway since 1950. Dr. Edward C. Rosenow, Jr., resigned as chairman in August and the undersigned was named as interim chairman by the Council at its August 8, 1959 meeting. Other members are Paul D. Foster of Los Angeles, Allen T. Hinman of San Francisco, Herbert W. Jenkins of Sacramento, Chester G. Moore of Salinas, and ex-officio members for the medical schools as follows: Seymour M. Farber, University of California; Lowell A. Rantz, Stanford University; Phil R. Manning, University of Southern California; Thomas H. Sternberg, University of California at Los Angeles; and G. E. Norwood, College of Medical Evangelists.

The advisory group of district representatives follows: E. F. Cain, Anaheim; G. Horace Coshow, Carpinteria; Patrick R. Allanson, Ukiah; Max Dunievitz, Auburn; Charles H. Cutler, Sacramento; Robert S. Quinn, Santa Rosa; Campbell H. Covington, Selma; and Edwin W. Tucker, Monterey, continue to assist. Due to the resignation of Dr. Charles H. Cutler, August 15, 1959, Dr. Robert Quillinan, Sacramento, was appointed in September, 1959. These physicians have assisted the Postgraduate Activities Committee greatly in stimulating interest in their areas and bringing to our attention special problems and needs.

Regional Postgraduate Institutes: The committee has conducted five two-day Postgraduate Regional Institutes in five regions of the state, each comprising several county medical societies as follows: Southern Counties at Disneyland Hotel; North Coast Counties at Hoberg's Resort; San Joaquin Valley Counties at Fresno; West Coast Counties at Carmel; Sacramento Valley Counties at Sacramento. The academic program at each Institute is planned by one of the five medical schools in the state after consultations with the local regional committee representing the various county medical societies. These Institutes offer a continuing interchange of professional experience between medical schools and practicing physicians, companionship and fellowship between colleagues, a combination of professional advancement and personal relaxation. There were some complaints regarding the new $25.00 fee for Institutes. It was felt that a decrease in Institute enrollment might be due to this factor. The fee will be lowered to $15.00 per Institute in 1960.

The committee is especially indebted to the five medical school postgraduate directors and their fine faculties for the excellent programs they have furnished and to regional chairmen: Edmund F. Cain, Anaheim; R. L. Zieber, Santa Rosa; Owen K. Steinbach, Fresno; Chester G. Moore, Salinas; and Robert H. Quillinan, Sacramento, for their unstinting efforts in handling all details ensuring the success of these conferences. The presidents and committees of the Woman's Auxiliaries have assisted greatly with registration and entertainment of wives during the programs.

Circuit Courses, consisting of lectures and conferences, and afternoon clinics in some cases, four in fall and four in spring, were given in the northern part of the state in Eureka, Ukiah, Napa, Dunsmuir, Chico, Marysville and Auburn, by faculty groups from the University of California and Stanford University Schools of Medicine. The fee was $30.00 for the series of eight, or $20.00 for the spring series of four. We are grateful to Dr. Farber of University of California and Dr. Rantz of Stanford University and their faculty members who arranged and presented the programs. Local chairmen for Circuit Courses are to be thanked for their continued cooperation. Several resident physicians accompanied instructors from the two schools on the circuit tours, this project supported financially by the C.M.A. public relations department.

Circuit Courses were given for the third time for West Coast Counties in Santa Maria and Ojai. The program "The Use and Abuse of Clinical Laboratory Tests in Patient Diagnosis and Treatment" was put on in each town on consecutive days by a faculty team of four from College of Medical Evangelists.

Annual Session Postgraduate Courses: At the request of the Committee on Scientific Work, the Committee on Postgraduate Activities, with the cooperation of University of California and Stanford University medical schools, again organized postgraduate courses as a part of the scientific program of the California Medical Association annual session in San Francisco, February, 1959. Five courses were offered with an enrollment of 270 physicians.

During the 1958-59 season the California Medical Association-medical schools jointly sponsored postgraduate courses had a total enrollment of 1,071 physicians. Faculty from the five medical schools participating numbered 138 and county society participants (on program or planning committees) was 140.

Motion Picture Program: Under the direction of Dr. Paul D. Foster, chairman of the motion picture division, seven film symposia (approximately 2½ hours each) and three general evening programs (approximately 2 hours each) were given during the annual session with total attendance estimated at 1,000 to 1,100. Attendance at the Symposia ranged from 50 to 250. There were 56 films shown on the 10 programs with 31 physicians (11 of these were authors of films) participating as moderators or panel members on the film symposia, approximately half from the five medical schools and half practicing physicians from C.M.A. membership.

Medical Dates Bulletin, an ever-growing listing of all postgraduate courses and medical meetings in the state has been published by this committee for the past six years. The format was changed from multilith to printing and redesigned for bulletin board use January, 1959 and mailed bi-monthly to the organizational and hospital listing, approximately 2,000, thereafter. A grant of $6,000 was received from Wyeth in March making it possible to add a mailing twice a year, in March and September, 1959, to all physicians in the state. *Medical Dates Bulletin* is also published in CALIFORNIA MEDICINE, 12 monthly issues each year.

During the year the Committee on Postgraduate Activities has held three meetings, two with the eight district representatives present. The committee is concerned with the number of postgraduate courses independently sponsored by pharmaceutical houses being offered in increasing numbers in California. The committee voted to hold a conference (or series of conferences) with representatives of pharmaceutical houses interested in postgraduate medical education. The first meeting will be held in December, 1959 or January, 1960 and is being arranged through the Pharmaceutical Manufacturers Association, Austin Smith, M.D., president. Tentative plans are being made for submitting an additional resolution to the House of Delegates during the 1960 annual session regarding pharmaceutical house participation in postgraduate medical education.

The committee was represented at the A.M.A. Congress on Medical Education in Chicago in February, 1959. Dr. Phil R. Manning, associate dean and director of Postgraduate Division, University of Southern California, presented a paper on the joint California Medical Association-medical schools intramural postgraduate courses during the Second World Conference on Medical Education entitled "Medicine —A Lifelong Study" in Chicago, September, 1959.

A final report of activities covering the various programs and activities of the past nine years was rendered to the Council by Dr. Rosenow on August 8, 1959.

Respectfully submitted,

ALBERT C. DANIELS, *Chairman*
Committee on Postgraduate Activities

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Committee on Scientific Work

To the President and the House of Delegates:

The Committee on Scientific Work meets twice a year with representatives of each of the scientific sections and plans the format for the annual session, including the allocation of space for scientific exhibits. The committee has made recommendations to the Council regarding the dates for annual session to enable the Association staff to reserve space for a minimum of five years in advance. It is the hope of the committee that the future dates for the annual session can be resolved. The committee urges all members of the Association to participate in the scientific section meetings.

Respectfully submitted,

ALBERT C. DANIELS, *Chairman*
Committee on Scientific Work

COMMISSION ON MEDICAL SERVICES

To the President and the House of Delegates:

During the past year the major work of the Commission on Medical Services has been accomplished in its various committees. Each committee is submitting a detailed report of its activities during the past year, and a review of this report will outline rather accurately the extent of the operation of the commission during the past year.

As a separate activity, meetings have been held with the Northern California Building Trades Health and Welfare Fund representatives in an effort to resolve areas of conflict and disagreement.

Meetings have also been held with the California Committee of the Health Insurance Council in an attempt to resolve some of the problems created by the operation of the commercial insurance carriers in the field of health and welfare, indemnity and major medical coverage, and some progress has been made to date. Further meetings are planned with this group, and a continuing study of mutual interests and operations is planned for the future.

The activities of the Commission on Medical Services have become, primarily, those affecting the field of socio-economics. The commission at no time has undertaken to act without complete dissemination of information, receipt of advice and instructions from the Council of the C.M.A., and this is the program which it plans to follow in the future.

Respectfully submitted,

FRANCIS J. COX, *Chairman*
Commission on Medical Services

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Committee on Aging

To the President and the House of Delegates:

The Committee on Aging has met five times during the past year. Attendance and participation of committee members were excellent.

At the direction of Council considerable time and effort were devoted, initially, in attempting to define the term "indigent." The importance of defining this term relates to society's apparent equation of the "indigent" with the recipient of public welfare, thus establishing indigency in terms of the eligibility criteria for public assistance. It is quite obvious that current social thinking includes medical care with food, clothing, and shelter as a basic human need. The federal grant-in-aid programs to the states for categorical assistance (old age security, aid to needy blind, aid to needy children) were originally designed to satisfy the need for food, clothing and shelter by giving the eligible recipient a direct money grant. This policy allowed the recipient to at least retain the responsibility for expenditure of the money. In 1950, however, federal legislation for the first time authorized the "vendor principle"; to wit, a recipient's need for medical care, i.e., hospitalization, could be satisfied by providing the service rather than providing the financial means for the recipient to purchase the service. In other words, the payment of tax monies directly to the vendor of a service was legalized. Since 1950 vendor payments have been

expanded to include other types of medical care, i.e., outpatient services. When government provides the service, it must assume the responsibility (which would otherwise rest with the recipient) for "proper" expenditure of the tax-dollar; thus the service (medical care) becomes subject to supervision and administrative regulation. Since eligibility criteria for public assistance vary from state to state, and since these criteria are observed and enforced to a greater or lesser degree by local county governments, the definition of indigency in these terms becomes quite ephemeral. Furthermore, the political definition of "need" appears to be increasingly lenient in direct proportion to its distance from local level with greater and greater segments of the population being included in prospective medical care programs of one type or another. The medical profession thus finds itself neatly impaled on the horns of a dilemma. Should doctors, who have traditionally cared for the "needy" with reduced or no fees, promulgate a system of government-controlled medical care, which can only lead to an eventual deterioration of that same care, by accepting reduced fees *from government?* It was the opinion of this committee that no attempt to define "indigent" should be made at C.M.A. level; rather that each doctor should decide in his own mind and his own heart those instances in which he should be charitable. And from a group standpoint maximum effort should be exerted to define and enforce the criteria for "need" at a local level.

It should be noted at this point, perhaps, that the Council has approved this committee's request to change its name from the Committee on Indigent and Aged to the Committee on Aging.

At the present time the primary objective of this committee is to encourage, stimulate, and promote by every means possible the development of *active* committees on aging in all component medical societies of the California Medical Association. It is this committee's firm conviction that only by local appraisal of assets and delineation of deficiencies, followed by appropriate action, can medicine factually demonstrate the superiority of voluntary and local government programs geared to local conditions. Implementation of this objective was initiated by (1) a personal communication from the President of the California Medical Association to all component medical societies urging them to establish and activate a Committee on Aging, if not already done so; (2) dedication of a portion of the Annual Conference of Medical Society Presidents and Secretaries to problems of the aging; (3) encouragement of the Woman's Auxiliary to undertake certain portions of the task of appraising local needs and resources; (4) development of a list of suggestions by which local committees on aging might initiate local activity. Some progress has been made but considerably more effort is imperative in the immediate future.

In June 1959 your chairman attended the National Planning Institute for the White House Conference on Aging (January 1961) held in Ann Arbor, Michigan. It is obvious that the high level of public interest in the problems of the aged will be further accentuated by the activity in which each state will engage in preparation for the White House Conference. Each state is expected to conduct a survey of its needs with respect to each and every area of the aging problems (housing, recreation, health, income, etc.) followed by a State Conference on Aging, from which appropriate recommendations will emanate to the White House Conference. A subsequent proposal for national legislation of one type or another from the White House Conference is a distinct possibility.

Another member of this committee, Allan Voigt, attended a Washington, D. C., meeting of the recently formed Joint Council to Improve the Health Care of the Aged, organized by the American Medical Association, the American Nursing Home Association, the American Hospital Association, and the American Dental Association. Subsequently, upon recommendation of this committee through the Medical Services Commission, the Council approved C.M.A. participation in the development of a California counterpart to the National Council with Allan Voigt being elected to its chairmanship.

Respectfully submitted,

THOMAS ELMENDORF, *Chairman*
Committee on Aging

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Committee on Fees

To the President and the House of Delegates:

The Committee on Fees held one- and two-day meetings at roughly monthly intervals throughout the year to consider the matters referred to it by the House of Delegates, the Council and the Commission on Medical Services.

The committee made recommendations concerning several resolutions from the 1959 House of Delegates to the appropriate higher echelon. Problems concerning the fees paid under the Medicare Program have been considered from time to time.

A subcommittee on the Industrial Accident Commission's Schedule of Fees, headed by Francis Cox, recommended further changes in that schedule. Doctor Cox appeared before the Industrial Accident Commission with other representatives of the C.M.A. to testify on behalf of the doctors in California. These efforts resulted in additional fees to be paid for certain common procedures, which should result in an estimated two and one-half million dollars in additional payments to physicians caring for industrial accidents.

The committee's major work has revolved about the revision of the Relative Value Study to be based upon the Survey of Fees carried out late in 1958. By February 1959 the data had been compiled, and we were able to begin the tedious and time-consuming job of analyzing the data and arriving at appropriate relative values for each of the approximately 600 items in the survey. Major changes in the ground rules covering use of the Relative Value Study were necessary in order to eliminate some of the major points of contention and misunderstanding in its use. Highly variable changes in the listed relative value to reflect the changing times and the changed ground rules will be evident in these revisions. With the aid of our subcommittee of consultants, representing all phases of medical practice, we are also endeavoring to improve the listing of procedures, to clarify the meanings and up-date the list. In addition, with the aid of the subcommittee of consultants, relative values for the roughly 1,200 items listed but not surveyed are being determined.

A preliminary report of our work through July 1959 was submitted to the county medical societies in September 1959 on order of the Council. In addition, when requested, dollar conversion factors for each county area calculated from the data received from that county in the survey were provided.

The work of revision continues as the year ends. The committee continues to feel that the Relative Value Study is an important economic and public relations weapon, and that the members of the C.M.A. expect us to protect its credibility and accuracy through careful, unhurried deliberation, even though such an approach must delay completion of our assigned task until the spring of 1960.

Respectfully submitted,

H. DEAN HOSKINS, *Chairman*
Committee on Fees

Committee on Government Financed Medical Care

To the President and the House of Delegates:

During the past year, the committee has worked with C.P.S., the Veterans Administration, the Department of Defense regarding the V.A. Hometown Care and Medicare programs, and with the State Department of Social Welfare concerning the Public Assistance program. Existing contracts were renewed. The fee schedule of both the V.A. Hometown Care and Medicare programs were improved, as were many other provisions. It would also appear that the Medicare program will be expanded in the near future.

The committee has met with representatives of the California Society of Internal Medicine to hear their request for a different approach to be taken by the V.A. to the use of procedure 0141. This matter has been discussed by representatives of this committee with both the V.A. and Department of Defense, and strong representations made. The matter is being followed vigorously.

Representatives from the California Vocational Rehabilitation Service met with the committee to discuss the matter of improving the fees for disability examinations under the BOASI program. This matter has been discussed with A.M.A. and they, in turn, have discussed it with the Department of Health, Education and Welfare. The committee will continue to try to adjust this situation.

The Liaison Committee to the State Department of Social Welfare has submitted a separate report because of the importance of its activities.

In California, the government financed medical care programs, it is estimated, spend approximately $333,000,000 annually. Over 1,700,000 medical care claims are processed and paid to over 10,000 physicians from three federal and state medical care programs alone.

The committee will continue to follow these programs and present the point of view and problems of the practicing physician to the administrators for the purpose of improving the care and service that patients will receive and the conditions under which the profession will render services.

I want to gratefully acknowledge the unselfish work of the committee's members: Doctors Leach, Morrison, Sharrocks, Vaughan, Berman, Elmendorf, Moore, Quinn, Attwood, Ludwig and Sherman.

Respectfully submitted,

JOHN M. RUMSEY, *Chairman*
Committee on Government Financed Medical Care

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Liaison Committee to the State Department of Social Welfare

To the President and the House of Delegates:

This committee has met twice since the last annual session for discussion of problems relative to the operation of the Public Assistance Medical Care program in California. Two members of this committee are appointees on the Advisory Committee to the State Board of Social Welfare. They have met frequently with the Welfare Department representatives and made reports of current developments to the Council.

During the year, the Department of Social Welfare was faced with a heavy deficit in the Public Assistance Medical Care program because a much larger amount was being spent for drugs than was expected. After consultation, payments from the program funds were limited to a specified list of drugs. This decision has brought about substantial economies without otherwise limiting medical professional services.

The last session of the legislature provided for a new program known as Aid to the Totally Disabled (A.T.D.). This program, which was effective October 1, 1959, will provide certain benefits for about 6,000 totally disabled persons. Complete ground rules and regulations were set up for this program which were mutually agreeable to the State Department of Social Welfare and the C.M.A.

As a result of another action taken by the legislature, provision was made for a uniform method of payment for professional services and the time limit for billing for professional services was fixed at six months.

The Department of Social Welfare requested the C.M.A. Council to empower the Liaison Committee to review questionable cases in which the county review committee had reached an inconclusive recommendation, as well as to review cases in counties which do not have review committees. This request was approved by the Council. Your committee has been called upon to review less than a dozen such cases.

It is the opinion of this committee that a very useful function is being performed for both the State Department of Social Welfare and the C.M.A. by having this committee represent our organization. I am very much indebted to Doctor John Rumsey, Doctor Horace Sharrocks, Doctor William Quinn, and Doctor Thomas Elmendorf for their fine cooperation on this committee.

Respectfully submitted,

SAMUEL R. SHERMAN, *Chairman*
Liaison Committee to the State Department of Social Welfare

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Committee on Rehabilitation

To the President and the House of Delegates:

The Committee on Rehabilitation has conducted a sampling survey in an effort to determine the knowledge of physicians on rehabilitation services within their localities, and in an effort to obtain a basis for evaluating existing services and facilities and possible need for future ones.

The committee will undertake a full scale sampling survey of the C.M.A. membership early in 1960. This survey will consist of a selected sample of 10 per cent of the C.M.A. membership.

Respectfully submitted,

ELIZABETH AUSTIN, *Chairman*
Committee on Rehabilitation

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Subcommittee on Foundations

To the President and the House of Delegates:

The Subcommittee on Foundations functioning under the Commission on Medical Services was directed by the Council to collect and pool information from various county societies sponsoring Foundation for Medical Care programs patterned after the original Foundation established in San Joaquin County. It was further directed to act as a central source of information for interested parties, particularly component county societies.

The following digest of facts and philosophy governing the so-called Foundation concept was presented to the commission and the Council.

The original Foundation for Medical Care was formed by the physicians of San Joaquin County in 1954 to study the economic problems of medical care in that area and to formulate policies to solve any local problems encountered. What eventually evolved was a service-type voluntary health insurance program geared to local needs and local costs. This meant setting up a health program based on local hospital costs, rather than state-wide figures, and based on professional fees then being used in private practice in that

county. The actual program included features not offered in most insurance policies; consultations, detention with patient, anesthesia, well baby care, assistant surgeon's fees, diagnostic x-ray and laboratory services in or out of hospital, etc.

The Foundation program operates under a corporation separate from the medical society, but whose membership is limited to medical society members. Such membership is on a voluntary basis. The members designate a fee schedule of their own choice, define the minimum essentials for insurance programs to be offered and establish a system of quality controls. These include a claims review committee and a claims processing department within the Foundation.

Foundations are not in the insurance business; they neither sell policies nor take risks. They merely approve programs of any and all qualified insurance companies which agree to the Foundation's concept and standards.

The San Joaquin Foundation has been widely publicized in the lay and medical press. Many of California's component medical societies, along with out-of-state medical groups and insurance organizations have evidenced a keen interest in the program.

The program in San Joaquin County is the only one operative long enough to justify conclusions. It appears that the users of the plan and the doctors are generally satisfied. Commercial carriers and California Physicians' Service seem very willing and able to sell such programs.

The advantages enumerated are local flexibility and autonomy providing the ability to cope with local needs. The local control and processing allows speedy settlement of claims and immediate payment.

The chief disadvantages arise from its local limitations. Such might preclude area-wide or state-wide contractual programs. Also physicians must contribute some time to the review and processing needed. A basic disadvantage is the acceptance of fee schedules and the service-type concept if such are contrary to a physicians' ideals. Some physicians have feared that it might undermine the popularity and prestige of C.P.S. As far as can be determined no downgrading of C.P.S. has been intended by any individual county society although the possibility of competition for the service-type programs is obvious. Prior to the Foundation's emergence, service-type programs were offered only by C.P.S. and certain closed-panel groups. It was the latter rather than C.P.S., which provided the development of the Foundation concept. It is noteworthy that C.P.S. seems willing to cooperate with county societies in offering and selling Foundation programming to the public.

It was the recommendation of the subcommittee that the C.M.A. actively study the advantages and disadvantages of the Foundation type programs. Since the programs seem to flourish it would appear appropriate to provide factual information to interested county societies, the general public, insurance companies, and other state and national medical organizations.

The subcommittee has held two formal meetings. Members of the subcommittee have consulted with component societies when invited to do so, providing data for their use. Speeches have been provided at the request of several county societies and often interested agencies.

Eleven county societies have Foundations in operation while *five* additional ones have been established with operation pending. Numerous other counties are debating the worth of a Foundation in their own areas. One county voted a so-called "Foundation" but later revoked it. This plan, the Los Angeles County Medical Plan, named "LAMP" embraced so many different principles that it is not to be compared with the term Foundation, as commonly accepted and used in this report.

The ten adjacent counties of the central valley area are cooperating in multi-county programs. Two counties have introduced an individual contract payable on a monthly premium basis.

Foundation programs currently in operation are offered by numerous nonprofit and commercial carriers, including California Physicians' Service.

The following table lists the current status of Foundations in California as of November 15, 1959:

County Society Sponsored Foundations Operating		County Society Foundations Established Operation Pending
Independently	Affiliated with Adjacent County	
San Joaquin	Calaveras	Orange
	Stanislaus	San Diego
	Tuolumne	Santa Clara
		Sacramento
Fresno	Kings	San Pedro Branch, LACMA
	Madera	
	Merced	
Kern	Tulare	
Sonoma		

It is stressed that the subcommittee's activity has been restricted to fact-finding and the dissemination of Foundation experience. No formal recommendation of policy has been presented to any county society.

Respectfully submitted,

JOHN F. MURRAY, *Chairman*
Subcommittee on Foundations

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Subcommittee on Uniform Claim Forms

To the President and the House of Delegates:

The work of the Subcommittee on Uniform Claim Forms has been continuing and a single claim form (Attending Physician's Statement) has been prepared.

Two formal meetings have been held since the last annual meeting. This form is now being used in four pilot study counties. It is anticipated that the pilot study will be completed after a six to twelve-month trial. Preliminary reports from San Diego County have been received. Since the pilot study started approximately 9,000 to 10,000 forms are being used monthly in San Diego. Quoting the San Diego preliminary report "Claim managers are happy with the form in this area and physicians are likewise pleased to know that one form takes the place of many. No suggestions or criticisms have been received to date. If and when any are received we shall save them and forward same to the proper committee through your office." It would appear that the form is acceptable.

The Health Insurance Council is watching the study with interest. Our action has been a catalyst to their Uniform Forms Committee. We have been notified that a single form will be "made available on a national basis to doctors and doctors' groups who insist upon it." They "hope to have something to recommend before the end of this year." This is an encouraging report from the Health Insurance Council. However, until such time as a uniform claim form acceptable to the C.M.A. is actually available from the Health Insurance Council, your committee recommends that we expand the availability of the C.M.A. single claim form.

In cooperation with the State of California Department of Social Welfare, the chairman reviewed a simplified and shortened "Medical Care Statement" prepared by their Division of Medical Care of the Department of Social Welfare. The form conforms with our policy of simplified forms. Congratulations and approval were forwarded to the Division of Medical Care.

In conclusion: (1) It is recommended: That the Subcommittee on Uniform Claim Forms be continued. (2) It is recommended: That if the results of the pilot studies are successful, sample forms should be circularized to all other counties. It is further recommended that the entire membership be advised the forms will be made available to them on a cost basis.

Respectfully submitted,

JOSEPH W. TELFORD, *Chairman*
Subcommittee on Uniform Claim Forms

COMMISSION ON PROFESSIONAL WELFARE

To the President and the House of Delegates:

During the past year, the members of the commission were kept advised of the activities of the committees under its supervision by written reports. It has not been necessary for the commission to hold a formal meeting.

Respectfully submitted,

ARTHUR A. KIRCHNER, *Chairman*
Commission on Professional Welfare

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Committee on Health and Accident Insurance

To the President and the House of Delegates:

During the year, the committee made a report to the county medical societies of the bids received from various carriers on submitted specifications for very broad hospital and nursing care for physicians and their dependents. These bids were evaluated by an independent actuary.

The offering of C.P.I.C. was accepted by the committee and recommended to the C.M.A. Council which in turn recommended that this be submitted to the various counties for their consideration. This was done so as not to create a conflict with existing major insurance plans. Enrollment was started the latter part of the summer of 1959, but participation turned out to be appreciably less than anticipated.

The committee reviewed the report of Lumberman's Mutual Casualty Company, the carrier of our group accident and sickness insurance. This program has now been in effect for six years and the present experience is sufficiently favorable so that on claims originating after December 1, 1959, disability payments will be increased without any change in present premiums. Throughout the year your committee has been active in claim adjudication with representatives of your insurance carrier.

The problem of extending benefits to age 75, to cover "senior physicians," was carefully studied. It is your committee's opinion that such an age extension is not actuarially possible or feasible except by effecting a relatively sharp premium increase for all age groups now covered in the present plan. This premium increase to cover age group 70 to 75 is not recommended by the committee. It is further not feasible to translate the presently anticipated benefit increase into an age extension without still considering an appreciable across the board premium increase for the membership.

Respectfully submitted,

HOMER C. PHEASANT, *Chairman*
Committee on Health and Accident Insurance

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Committee on Private Practice of Medicine by Medical School Faculty Members

To the President and the House of Delegates:

During the past year the committee met in Palo Alto with representatives of the local county medical societies, Stanford University Medical School and the University of California School of Medicine (San Francisco).

Discussion centered around the continued efforts to implement the recommendations made by this committee several years ago and on the move of Stanford to its new location.

Several matters which had caused the local county medical societies concern were discussed, and the committee was satisfied that these problems had been satisfactorily resolved on the local level, and that no further action by the committee was necessary.

A speech given by Mr. William McPeak of the Ford Foundation, at the dedication ceremonies of the Stanford University Medical School was reviewed by the committee, and even though the committee disagreed with some of the statements made by the speaker, it was our belief that, inasmuch as the committee's activities and liaison with medical schools was concerned, statements made by this speaker were not within the province of this committee.

Other matters relating to publicity, press releases, letters and private practice by full time faculty members were reviewed and solutions worked out on a local level. The present policies for repayment to Stanford by full time faculty members for overhead expenses incurred in private practice was discussed with the university representatives. At the present time, policies are in the preliminary stages of development, and it is planned that when completed, such policies will cover the repayment by the faculty members of actual operating costs. Such costs would include the daily operating costs and not the plant investment. It is the committee's feeling that such a policy is in accord with the previous recommendations of this committee. The University of California School of Medicine maintains a continuing review of the practices of full time faculty members in relation to the standards set forth by this committee several years ago, and a good relationship is maintained with the local medical society.

No meeting has been held in the southern part of the state, because, in the opinion of the Los Angeles County Medical Association, there was no need for the committee to intervene in the liaison and working relationships which have been developed on the local level. The committee recommends more frequent and more complete exchange of information between the medical schools and local medical societies through their liaison committees.

Respectfully submitted,

HERBERT MOFFITT, JR., *Chairman*
Committee on Private Practice of Medicine by Medical School Faculty Members

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Medical Review and Advisory Board

To the President and the House of Delegates:

A report of the recent trends in malpractice was prepared by the board and reported to the membership in an article published in the January issue of CALIFORNIA MEDICINE.

The board recommended and the C.M.A. Council approved an educational program for C.M.A. physicians and the public, urging widespread immunization against tetanus. An article by Doctor Donald E. Ross, a member of the board, was approved by the board and the C.M.A. Council and published in the May issue of CALIFORNIA MEDICINE. Leaflets for your patients explaining this program are available.

During the past session of the legislature, two measures were passed which were favored by the board. Section 1871 of the Code of Civil Procedure was amended to provide that in counties having a population over 4,000,000, the court may appoint an expert "to investigate and testify at the trial" of

any matter in which expert evidence is required, and the compensation for such witness shall be fixed by the court and paid by the county.

The other measure grants a certain immunity to physicians who render professional services in emergency situations such as at the scene of an accident, fire, etc.

The board has been studying the problems incident to cardiac resuscitation in places other than a general hospital. An informative paper is being prepared for the guidance of the profession. A number of similar problems are being considered and will be reported to the profession.

The board met with members of the Insurance Committee of the California Hospital Association to discuss the showing of the film, "No Margin for Error," the formation of Joint Medico-Legal Education Committees as recommended by the A.M.A. and A.H.A., and other problems relating to insurance and malpractice prevention faced by hospital administrations and the medical profession. It is believed that such liaison and exchange of ideas will prove worthwhile to both organizations.

I am grateful for the untiring work of the members of the Medical Review and Advisory Board—Doctors Stanley Moore, Wm. F. Quinn, Wm. Kaiser, James Powell, Eugene Webb, James Yant, Leo J. Adelstein, H. I. Burtness, Donald E. Ross, Rees B. Rees, and H. M. Ginsburg.

Respectfully submitted,

ARTHUR A. KIRCHNER, *Chairman*
Medical Review and Advisory Board

COMMISSION ON PUBLIC AGENCIES

To the President and the House of Delegates:

This commission has functioned mostly through the agencies of the many committees under it, namely that of State Medical Services, Medical Health, Other Professions, Veterans Affairs and Adoptions. As is indicated below each one of these committees has had an active assignment which they have met with enthusiasm and perseverence. This commission has met once during the year to generally review the organization and general trend of committees under it and to remain aware of the major trends that are occurring in the thoughts and actions of each its subcommittees. The most active committee in the sense of frequency of meetings has been that on the State Medical Services where the liaison with the State Department of Public Health has been very effective and worth while.

Respectfully submitted,

WARREN L. BOSTICK, *Chairman*
Commission on Public Agencies

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Committee on Adoptions

To the President and the House of Delegates:

The Committee on Adoptions, during the past year, held two meetings. It has drafted a Manual of Adoptions for Physicians which will be printed and sent to the membership.

The committee continues to study the current problems relating to adoptions as they affect physicians.

The committee has recommended to the C.M.A. Council that each county medical society establish a committee on adoptions or assign the matter of adoptions to an existing committee, in order that the membership of the county society may be kept abreast of the local problems relating to adoptions, have an informed local source to which physicians having problems relating to adoptions can turn for advice, and to act as a liaison committee with local adoption agencies.

The committee will attempt to be alert to derogatory newspaper articles on the subject of independent adoption, particularly sensational statements on "Black Market Babies." It is proposed to make the Manual of Adoptions available to newspapers, attorneys, medical societies, adoption agencies, maternity homes, etc.

I am most grateful to Doctors Mapes, Tieche, Telford, McNeil, McNulty, Walsh, Degenhardt and Fenlon, members of this committee, for their fine cooperation and dedication to the work of the Association.

Respectfully submitted,

GEORGE K. HERZOG, JR., *Chairman*
Committee on Adoptions

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Committee on Mental Health

The Committee on Mental Health has spearheaded an effort to change the definition of legal insanity. Doctor Rudolph B. Toller, chairman, Subcommittee on Forensic Psychiatry, reports that "the Subcommittee on Forensic Psychiatry of the Mental Health Committee proposed changes in Section 1026 and 1026A of the California Penal Code. The Legislative Committee of the California Medical Association prepared the amendments. The Honorable William L. Biddick of Stockton, member of the assembly, introduced the amendments. The committee met with Mr. Biddick and also appeared before the Legislative Committee on hearing for this bill. Later, members of the committee met with Mr. Biddick, representatives of the Attorney General's office and representatives of the district attorneys for further discussion of the bill. The bill was withdrawn when the Governor agreed to appoint a committee studying the problem of criminal insanity in the State of California. The Governor has appointed such a committee.

"This committee was successful in bringing to official attention the need for changes in the statutes in the State of California covering criminal insanity."

A recommendation was made by the committee that a pilot study on narcotic addiction be undertaken. A study is now being done by the state in Chino.

Study has been made of the inclusion of coverage for certain psychiatric procedures in insurance plans and this seems to be a probable development in the near future.

The committee has expressed its concern over the numerous courses being offered within the state on hypnosis. The committee recommended to the Council that a policy be adopted regarding such courses and this has been done. The current position of the Association is as follows:

> "That courses for physicians dealing with hypnosis be given exclusively by recognized medical teaching institutions."

The committee is planning to continue studying this field and will make additional recommendations to the Council.

Meetings have been held with the California State Psychological Association, and the excellent liaison between that organization and this committee is continuing. The purpose of these meetings was to study the interrelationship between psychologists and the medical profession.

The chairman appreciates the loyal and inspirational help given him by the individual members of his committee. The entire committee is profoundly sorrowful over the recent loss by death of our beloved committee member, Doctor Frank Otto, who through the years contributed so much to our activities.

Respectfully submitted,

STUART C. KNOX, *Chairman*
Committee on Mental Health

Committee on Other Professions

To the President and the House of Delegates:

During the last year, the Committee on Other Professions has met with representatives of the California Pharmaceutical Association, California Osteopathic Association, California State Nurse's Association, and the California League of Nursing. Certain matters have been handled by correspondence and telephone conference with the California Optometric Association and the California State Dental Association. Doctors J. Phillip Sampson and William Evans, who are members of this committee, are also members of the Advisory Committee to the State Board of Nurse Examiners and represent the California Medical Association to this group. The committee has represented the California Medical Association on the Coordinating Committee on Nursing Education, the State Board of Nurse Examiners' Committee to Evaluate Associate Degree Programs in Nursing (2-year programs), and the California League of Nursing Committees on "Careers in Nursing," and "Committee to Study Nursing Needs and Resources in California."

At their annual meeting on July 12, 1959, the American Osteopathic Association, as the first order of business, took official notice of the action of the House of Delegates of the A.M.A. dealing with osteopathy and of rumors of negotiations between the California Osteopathic Association, representatives of the Los Angeles College of Osteopathy and the California Medical Association. At that time, by a vote of 95 to 22, the American Osteopathic Association adopted a resolution of policy rejecting the overtures of the A.M.A. and indicating their intention to "maintain its status as a complete school of medicine." Eighteen of the twenty-two votes against this action were cast by the eighteen osteopathic delegates from California. This rejection of all consideration of any possibility of action which might conceivably result in elimination, absorption, amalgamation or merger of the osteopathic profession appears to have terminated negotiations along this line at the state level.

Respectfully submitted,

WAYNE POLLOCK, *Chairman*
Committee on Other Professions

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Committee on State Medical Services

To the President and the House of Delegates:

This committee has met with Doctor Malcolm Merrill, Director of the State Department of Public Health and his staff at regular intervals throughout the year. Through it, the major programs of the Health Department have been reviewed and Doctor Merrill has been most willing to use this committee on a consultative basis whenever he contemplates or sees in the future, programs which would concern medicine.

This committee has been able to work closely with the Director of Public Health on active programs such as air pollution, radiation hazard, the cancer quack bill, general problems of alcoholic rehabilitation and, more recently, certain aspects of the migratory problem. Constantly referred are the rabies control activities and general basic budgetary needs and plans of Doctor Merrill's department. The liaison remains most cordial and, we believe, mutually worth while for both the State Department of Public Health point of view and the California Medical Association. At each meeting of the Council, Doctor Merrill (who himself is usually present) or one of his staff members, reports to the Council on the current activities of the Health Department so that the California Medical Association remains unusually informed and aware of its many contacts with Public Health.

Respectfully submitted,

WARREN L. BOSTICK, *Chairman*
Committee on State Medical Services

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Committee on Veterans Affairs

To the President and the House of Delegates:

The objectives of this committee are:

1. Liaison with state and national veterans organizations such as the American Legion, VFW and DAV. (a) To present medicine's point of view to the veterans organizations. (b) To obtain the point of view of the veterans organizations.

2. Liaison with other medical organizations such as National Medical Veterans Society in order to keep these groups up to date as to the C.M.A. position and activities in relationship to the VA, and to keep the C.M.A. informed on the activities of such organizations.

3. To study the VA operational program. (a) The problem of care of nonservice connected cases. (b) Construction of new hospitals.

4. Liaison with C.M.A. Committee on Government Financed Medical Care.

It was generally agreed that the medical profession has been somewhat lax on the local level in associating, understanding and working with veterans groups, and to correct this situation the following suggestions were made:

1. Urge doctors to join veterans organizations.
2. Urge each county medical society to establish an active committee on veterans affairs.
3. Urge eligible members of the C.M.A. to join the National Medical Veterans Society and for the C.M.A. to work more closely with that group. This will allow the doctor and the veteran to better understand what each is trying to accomplish.

The committee's immediate job is to educate doctors regarding admissions to VA and other government hospitals. The committee plans therefore to undertake a survey to determine the following:

1. The number of general, medical and surgical beds used for long-term illnesses.
2. The number of service-connected patients admitted: (a) by the veteran himself; (b) referred by a veterans' organization; (c) on advice of a physician.

Respectfully submitted,

CHARLES B. HUDSON, *Chairman*
Committee on Veterans Affairs

COMMISSION ON PUBLIC POLICY

To the President and the House of Delegates:

The Commission on Public Policy has considered all House of Delegates resolutions referred to it and has presented its recommendations to the Council.

Respectfully submitted,

DAN O. KILROY, *Chairman*
Commission on Public Policy

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Committee on Legislation

To the President and the House of Delegates:

The Legislative Committee of the California Medical Association submits the following as an interim report. A supplemental report will be rendered from the floor at the

1960 meeting of the House of Delegates of the California Medical Association.

The year 1959 was a regular session of the California Legislature and engaged the full activities of the Legislative Committee for the first six months of that year. Many bills of marked interest to medicine were introduced at this session of the California Legislature.

In addition many duties of your Legislative Committee were completed beyond the actual attendance with the California Legislature.

Medicine was again well represented in Sacramento through the ever able assistance of Mr. Ben Read, executive secretary of the Public Health League, and Mr. Gene Salisbury, assistant executive secretary of the Public Health League. In addition John Fraser was added to the Public Health League staff with primary interest in the field of insurance and the services of Mr. Fraser were found to be of tremendous assistance to your committee. Mr. Howard Hassard, legal counsel of the California Medical Association, spent many hours in Sacramento and in consultation on legislative matters, assisting your committee in carrying out its various duties.

On behalf of your Legislative Committee composed of Doctors J. Lafe Ludwig of Los Angeles, Ernest W. Henderson of Alameda and myself I wish to express our thanks to the many physicians of California and to the executive secretaries who assisted the Public Health League and your Legislative Committee in carrying out their various responsibilities throughout this past year.

Respectfully submitted,

DAN O. KILROY, *Chairman*
Committee on Legislation

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Committee on Public Relations

To the President and the House of Delegates:

With the permission of the Speaker and the members of the House of Delegates, the members of the Committee on Public Relations request the privilege of permitting Dr. Malcolm S. Watts, chairman, to make a supplementary report from the floor at the 1960 meeting of the Association.

* * *

The first annual statewide conference of County Society Public Relations Chairmen was held in Palo Alto on September 19, 1959. More than 50 physicians and county society executive secretaries attended.

Experiences in PR techniques were related by Doctors Malcolm C. Todd, Long Beach; Paul D. Foster, president-elect, Los Angeles; Raleigh H. Lage, Oakland; Clarence A. Luckey, Stockton; and Robert C. Combs, San Francisco.

Others taking part on the program included Doctors T. Eric Reynolds, president; Francis E. West, immediate past president; and Malcolm S. Watts, who discussed the Theory of Medical Public Relations.

Dr. Combs, one of the discussion group leaders, reported:

"It was my impression that the chairmen of the smaller county PR committees were happy to be invited to this meeting. By and large, it seems to me they are doing a good job in their local communities. . . . A good part of our time was spent considering which of the techniques, which had been outlined in the morning seminar, would be applicable to the smaller counties. It was astonishing to hear that they were, in many cases, doing just what we had pointed out and in addition, they felt that the others they had not tried could be tried with optimistic expectations of good results. They seemed to feel that their press relations had improved in recent years. . . . I think the whole meeting was well worthwhile and believe that it is probably worth the expenses sustained by C.M.A."

Ed Clancy, director of PR, and Bob Marvin, associate director, reported on department activities.

Members voted for the appointment of a steering committee to C.M.A.'s PR Committee to be composed of a number of county society PR chairmen.

Discussions emphasized time and again that the best public relations for the entire profession stem from the good relationships created by the physician in his own office with his own patients.

One of the panel groups resolved this relationship into three simple points:

1. Honesty,
2. Availability, and
3. Rendering good medical care.

Put in another way, the three points bear close synonymity to C.M.A.'s basic PR fundamentals—fundamentals which have been put into operation by the PR staff with the valued cooperation of all county societies, to-wit:

1. The establishment of emergency medical care,
2. Service regardless of the patient's inability to pay, and
3. The establishment of Public Service Committees for the adjudication of physician-patient misunderstandings.

The PR staff report included:

Planning the important visitations of the President and the President-Elect to the 40 component county societies.

Planning the annual Rural Health meeting and the two (one in the North, one in the South) Physician and Schools Conferences.

Planning the Student A.M.A. meetings in cooperation with the San Francisco and Los Angeles County Medical Associations.

Assisting with the Governor's Annual Traffic Safety Conference.

Assisting other C.M.A. committees in the public relations aspects of their activities.

Being on call for assignments from the Council and the Executive Director.

Being on call for any and all assistance to county societies.

Advising on press, radio and TV relationships and programs.

Publishing *Newsletter.*

* * *

This brief report would not be complete without giving recognition to the valued assistance of the county society officers and county society executive secretaries. Without their intelligent and enthusiastic cooperation, C.M.A.'s relations with the public—*and* the press—would not be in the successful position they are today.

Respectfully submitted,

MALCOLM S. WATTS, *Chairman*
Committee on Public Relations

JUDICIAL COMMISSION

To the President and the House of Delegates:

The Judicial Commission has met and heard the cases brought before it for adjudication.

Respectfully submitted,

DONALD A. CHARNOCK, *Chairman*
Judicial Commission

REPORTS OF OTHER COMMITTEES

ADVERTISING COMMITTEE

To the President and the House of Delegates:

The Advertising Committee was established as a special committee by the Council in 1946 and has functioned regularly since that time.

Its duties are to review all advertising submitted for CALIFORNIA MEDICINE and to approve, reject or suggest modification of the copy. Today, with more than 100 advertising pages in each issue of the journal, there is obviously a large volume of material to come before the committee. To handle this material, the committee generally meets every week during the year, holding more meetings than any other committee in the California Medical Association.

While the committee has reported only to the Council in the past, it has been suggested that a report be made to the House of Delegates at this time, along with reports of other special committees in the C.M.A. structure.

To make such a report, a review of the history of the committee and the problems confronting it seems to be in order.

Prior to 1946 the Association had relied upon the American Medical Association to screen all advertising copy submitted by national advertisers. It had also relied on a cooperative selling organization representing nearly all state medical journals as the source of its national advertising sales. In 1946 the C.M.A. Council, for reasons deemed satisfactory to it, voted authority to withdraw the journal from the cooperative selling group. One of the principal reasons for this decision was the belief that the business methods then used by the cooperative were not conducive to optimum results for CALIFORNIA MEDICINE.

While the Association withdrew from the sales activities of the group and established its own sales department, it continued to rely on the A.M.A. for the screening of advertising. Thus, any advertisement bearing the former A.M.A. "Seal of Acceptance" was usually considered suitable for publication in CALIFORNIA MEDICINE and not subject to further scrutiny by the C.M.A. Advertising Committee.

Subsequently, the American Medical Association, for legal reasons, discontinued its "Seals of Acceptance" and thus threw the entire advertising review problem wide open.

The A.M.A. established its own advertising review committee, the functions of which have never been widely publicized or understood. Many state associations set up their own advertising committees or relied upon a committee established by the journals remaining in the cooperative sales group. The California Medical Association relied upon its own advertising committee for the screening of *all* advertising; this responsibility continues today.

While these changes were taking place, even more startling changes were occurring in the pharmaceutical industry. It does not need repeating here that there has been a tremendous revolution in the pharmaceutical industry in recent years. Many of the drugs used and prescribed today were unknown twenty or even ten years ago. Many other drugs, even though known earlier, have been recognized as useful in additional types of therapy and many others have been combined with other elements to further their usefulness.

With this rapid and continuing revolution in the drug industry there has come an extremely sharp competitive situation in the pharmaceutical field. Producers have expanded their research activities, their marketing activities and their promotional activities. Each is anxious to be the first on the market with a new product in a given field of therapy or with a new combination considered more rational, more effective or less toxic. A glance at the advertising pages of any medical journal demonstrates this situation. A review of all new drugs shows that between 400 and 500 new pharmaceutical products come onto the market each year.

With this volume of merchandise and this competition in marketing drug products, the advertising agencies have entered into the picture in large numbers. They have employed technical talent, have engaged medical directors and have sought ever new methods of presenting their products to the medical profession. The unemotional, cold approach of a protocol disappears under these circumstances, its place taken by the display and descriptive techniques with which we have long been familiar in the advertising of cigarettes and automobiles.

It is the function of the Advertising Committee to sift the volume and variety of materials coming before it and to screen out excessive or unsupported claims, in order to assure the readers of CALIFORNIA MEDICINE that they are not being subjected to a barrage of ill-advised, premature or excessive advertising claims. The advertising pages of a medical journal play a recognized part in the dissemination of new diagnostic and therapeutic facts; the committee's function is to see that this part is not overplayed or subjected to abuse.

The committee has established a set of criteria for the acceptance of advertising and most other state and county journals and bulletins have done likewise. However, any set of regulations is subject to interpretation and it is obvious that not all reviewing bodies exercise the same degree of discrimination used by the C.M.A. Advertising Committee. Today, CALIFORNIA MEDICINE is regarded as the most discriminating of all medical journals in the advertising accepted for publication in its pages.

The committee does not dispute this appraisal as it is well aware that rejections have sometimes resulted in advertisers using county bulletins, including some in California, or other media possessing different standards.

The committee strives constantly to avoid any capricious or arbitrary stand in its judgment of advertising copy by frequently reviewing the adopted Rules of Advertising and their interpretation by the committee. That the committee's actions reflect the desires of California physicians has been amply demonstrated by the reports of Reference Committees reviewing Advertising Resolutions and by the unanimous support of the House of Delegates. The last report dated April 30, 1958 on Resolution No. 16, unanimously adopted by the House of Delegates states: (Reference Committee 3b) "found that the present rules for advertising in CALIFORNIA MEDICINE are very commendable." . . . "It was realized that rules are only as good as the men who apply them. Your Reference Committee is confident that the present advertising committee has been doing a superb job. Members are invited to compare advertising in CALIFORNIA MEDICINE with that in other journals in the United States." . . . "Resolved: The House of Delegates of the C.M.A. commends the Committee on Advertising of CALIFORNIA MEDICINE for its excellent work."

Despite such enthusiastic support the committee feels that review of its regulations is a continuing need dictated by common sense and designed to keep abreast of all developments in medical and pharmaceutical fields.

The committee unanimously agrees that CALIFORNIA MEDICINE should maintain a high standard of advertising. Even the federal government has, within the last few days, announced that the Federal Trade Commission will review *all* types of advertising in search of obvious deceptions. The committee welcomes suggestions by the Council and the House of Delegates.

The committee is composed of the chairman, Robertson Ward, a surgeon; Allen T. Hinman, an internist; W. Dayton

Clark, an obstetrician-gynecologist; Eugene S. Hopp, an otolaryngologist, and Ralph W. Weilerstein, clinical pharmacologist. In addition, it maintains a long list of consultants in all medical specialty fields. It is my pleasure to express profound thanks to all committee members and consultants for their valuable contributions throughout the years. Our thanks also go to Mel Tyler, advertising manager of CALIFORNIA MEDICINE, and the advertising department for their constant assistance in all respects.

Respectfully submitted,

ROBERTSON WARD, *Chairman*
Advertising Committee

BUREAU OF RESEARCH AND PLANNING

To the President and the House of Delegates:

The Bureau of Research and Planning has met at periodic intervals for the purpose of discussing subjects of broad interest to the Association. The bureau has attempted to avoid handling matters of an immediate nature and is directing its efforts more toward the problems confronting the profession which require considerable study and which are of an evolutionary nature.

The bureau was instrumental in the establishment of an economics library in the Association headquarters. This library, in its formative stages, will serve primarily the members of the bureau until such time as the reference material available is sufficiently broad to serve other committees, county societies and individual members.

The matter of communications within the profession is one which the bureau has given considerable thought and study, and it is believed that this represents a most pressing problem and one which deserves a great deal of additional study.

Individual members of the bureau are attending important meetings throughout the country, and in this way the entire bureau is informed of major developments affecting the profession and is advised on current trends. Throughout the country there are a great many studies being done which will affect the private practice of medicine. The bureau plans to review the results of these studies as they become available.

Respectfully submitted,

FRANCIS E. WEST, *Chairman*
Bureau of Research and Planning

FINANCE COMMITTEE

To the President and the House of Delegates:

The 1959 House of Delegates adopted several amendments to the By-Laws which eliminated the office of Treasurer from the official roster of the Association. Subsequently, all financial procedures of the Association have been handled under the supervision of the Finance Committee.

This committee consists of three members at this time, this number being specified in the By-Laws. However, it has been deemed preferable to have the committee membership expanded to five, so that a broader geographical and philosophical scope may be gained by the committee. By-Laws amendments to effect this change will be introduced into the 1960 House of Delegates.

The Finance Committee has been unusually active in the past year, due not only to the need of financing the purchase of a new headquarters building but also to the need of providing suitable and effective methods of financing the broadened scope of activities of the Association and reporting to the Council on the entire fiscal picture of the Association.

In the past year the committee has made several recommendations to the Council for more effective financial procedures and reporting. One of these has been the requirement that the Council must submit to the Finance Committee, for study and written report, all proposals before the Council which require the expenditure of funds beyond the budget voted by the House of Delegates for the fiscal year. Where such appropriations are approved by the Council, they are then set out separately on a financial report form, so that the Council may at all times have clearly before it the cumulative total of its additional appropriations.

The committee also asked the independent Certified Public Accountant to review all fiscal procedures of the Association and recommend changes which would (1) result in the most effective internal control possible with a limited staff and (2) make it possible to furnish periodic financial reports to the Council to assure that body of receiving complete and up-to-date information on all financial aspects of the Association. These recommendations are now under study and will doubtless be put into effect at an early date.

Along this line, the members of the House of Delegates should realize that the California Medical Association is a single operating entity but that it is tied in very closely with several other entities. These are the Trustees of the California Medical Association, a nonprofit corporation designed to hold excess assets of the Association; Physicians' Benevolence Corp., a nonprofit organization to provide benevolences for needy physicians and their families; Audio-Digest Foundation, wholly owned by the C.M.A. and dedicated to contributing its earnings to medical education, and Pacific Magnetic Tape Equipment Co., also wholly owned and engaged in the business of selling equipment to reproduce the educational tapes produced by Audio-Digest.

During the past few years the California Medical Association, which is the basic organization in this structure, has been called upon to undertake new and unforeseen activities, many of which have cost considerable sums. Where such activities have been voted approval following adoption of an annual budget, their cost has necessarily come from accumulated reserve funds. At this time such funds have been exhausted and the Association has been forced to finance its activities at the end of each calendar year by borrowing from the Trustees, which in turn borrow from a bank on a line of credit.

The financial reports printed in this issue (page 33), taken directly from the reports of independent auditors, show that for the past two fiscal years the Association has overspent its income and that a financial deficit has resulted. Obviously, this situation cannot continue unless reserves are to be depleted; either the Association's activities must be reduced to match the available funds or the dues must be increased to provide funds to pay for approved functions.

The Finance Committee is preparing a budget for the 1960-1961 fiscal year. When such budget has been approved by the Council it will be submitted to the 1960 House of Delegates and placed before a reference committee. All members are invited to appear before the reference committee and contribute their thinking to its deliberations.

Meanwhile, there are reproduced as a part of this report the audited financial statements of the California Medical Association, Trustees of the California Medical Association, and Physicians' Benevolence Fund, Inc.

These reports are submitted in behalf of the chairman and Doctors Samuel R. Sherman and Burt L. Davis, committee members, and Doctors Paul D. Foster and J. Norman O'Neill as consultants to the committee.

Respectfully submitted,

IVAN C. HERON, *Chairman*
Finance Committee

CALIFORNIA MEDICAL ASSOCIATION

Exhibit A

Statement of Net Assets, June 30, 1959

ASSETS:		
Cash		$215,355.63
Accounts receivable, net		25,261.58
Loans receivable	$141,620.00	
Less reserve	141,620.00	
Remainder		
Investment in United States Treasury bills, $200,000 due September 17, 1959 (at cost)		198,344.00
Furniture and fixtures (at nominal value)		1.00
Prepaid insurance		1,959.00
Prepaid rent and postage		2,528.35
Deposits		1,025.00
TOTAL ASSETS		$444,474.56
LIABILITIES AND DEFERRED INCOME:		
Accounts payable:		
American Medical Education Foundation	$156,561.50	
Other	42,566.25	
TOTAL		$199,127.75
Deferred income		3,143.91
TOTAL LIABILITIES AND DEFERRED INCOME		$202,271.66
NET ASSETS		$242,202.90

Exhibit B

Statement of Income, Expenditures, and Net Assets for the Years Ended June 30, 1959 and 1958

	YEAR ENDED JUNE 30	
	1959	1958
INCOME:		
DUES AND GENERAL:		
Membership dues, less portion allocated to CALIFORNIA MEDICINE subscription	$732,057.77	$704,887.74
Postgraduate institute	19,111.00	17,505.00
Fee for collection of American Medical Association dues	3,946.51	3,825.87
Interest earned	5,413.26	5,729.97
Other	20.93	511.61
TOTAL	$760,549.47	$732,460.19
OFFICIAL JOURNAL—CALIFORNIA MEDICINE:		
Advertising	$191,216.39	$189,634.60
Other subscriptions	2,193.00	2,384.78
Reprints, net	646.21	720.86
TOTAL	$194,055.60	$192,740.24
Less expenditures (Schedule 1)	216,900.10	211,995.94
Net cost of journal	$ 22,844.50	$ 19,255.70
Portion of members' dues allocated	50,646.00	49,563.00
Remainder	$ 27,801.50	$ 30,307.30
TOTAL	$788,350.97	$762,767.49
EXPENDITURES (Schedule 1):		
Administration	$270,733.68	$254,558.95
Scientific, educational, and public relations	566,945.91	548,611.00
TOTAL	$837,679.59	$803,169.95
EXCESS OF EXPENDITURES OVER INCOME—CURRENT YEAR	$ 49,328.62	$ 40,402.46
OTHER CREDITS (*DEBITS*), NET:		
Reduction in reserves on account of payment on loans	$ 32,923.50	$ 45,534.00
Reduction in reserves on account of loan sold to Trustees	55,000.00	
TOTAL	$ 87,923.50	$ 45,534.00
Less:		
Reserve provided for loan during year ended June 30, 1958		*66,300.00*
Expenses applicable to prior years, net	*2,028.06*	*948.35*
Other credits (*debits*), net	$ 85,895.44	*$ 21,714.35*
NET ASSETS:		
INCREASE (*Decrease*)—CURRENT YEAR	$ 36,566.82	*$ 62,116.81*
BALANCE AT BEGINNING OF YEAR	205,636.08	267,752.89
BALANCE AT END OF YEAR	$242,202.90	$205,636.08

Italic figures denote decrease.

CALIFORNIA MEDICAL ASSOCIATION

Exhibit B—Schedule 1

Statement of Expenditures for the Years Ended June 30, 1959 and 1958

	YEAR ENDED JUNE 30	
	1959	1958
ADMINISTRATION:		
Salaries:		
Executive	$ 46,024.96	$ 38,703.34
Clerical	38,240.05	33,642.82
TOTAL	$ 84,265.01	$ 72,346.16
Office expense:		
Rent	$ 9,991.56	$ 9,991.56
Telephone and telegraph	5,333.67	5,514.90
Equipment purchases and maintenance	4,689.28	6,455.35
Dues and subscriptions	3,035.00	3,529.71
Postage	2,266.78	2,169.46
Supplies and sundry	11,629.05	10,972.07
Los Angeles (other than salaries)	5,546.29	4,475.55
TOTAL	$ 42,491.63	$ 43,108.60
Legal	$ 32,902.29	$ 19,500.03
Meeting expense:		
Annual session	$ 42,693.39	$ 40,201.92
American Medical Association's meetings	39,919.46	31,446.45
Student assistance—American Medical Association's meetings	3,652.65	3,684.12
Council	8,684.22	7,196.40
Secretarial conference	4,208.29	4,026.13
TOTAL	$ 99,158.01	$ 86,555.02
Less annual session exhibitors' fees	39,995.00	33,360.00
REMAINDER	$ 59,163.01	$ 53,195.02
Travel expense:		
Council	$ 17,371.60	$ 16,621.95
Officers	7,336.66	3,282.30
Administrative	3,453.84	3,175.24
TOTAL	$ 28,162.10	$ 23,079.49
Other expense:		
The Woman's Auxiliary	$ 7,484.69	$ 8,914.47
Professional fees for survey of Association's operational structure	----------	25,522.33
Payroll taxes	4,384.89	3,003.47
Insurance	8,184.12	4,878.05
Miscellaneous	3,695.94	1,011.33
TOTAL	$ 23,749.64	$ 43,329.65
TOTAL	$270,733.68	$254,558.95
SCIENTIFIC, EDUCATIONAL, AND PUBLIC RELATIONS:		
Medical Services	$ 70,234.78	$ 40,204.27
Public Health and Public Agencies	13,191.24	15,332.83
Public Policy	142,186.43	119,846.67
Medical Education	63,906.69	52,527.95
Cancer Commission	33,861.70	32,143.98
Professional Welfare	40,556.92	95,492.87
Medical Executives	8,381.53	6,521.33
Special Committees	10,772.25	9,854.73
Contributions:		
American Medical Educational Foundation	156,561.50	150,559.00
Physicians' Benevolence Fund, Inc.	16,195.25	15,418.25
Medical Libraries	8,097.62	7,709.12
Nursing League	3,000.00	3,000.00
TOTAL	$566,945.91	$548,611.00
OFFICIAL JOURNAL—CALIFORNIA MEDICINE:		
Printing	$152,090.26	$143,834.22
Advertising sales expense	14,932.81	20,384.00
Salaries	26,793.33	24,515.17
Rent	3,638.28	3,458.80
Telephone and telegraph	1,797.08	2,201.87
Postage and mailing	7,081.61	6,988.43
Addressograph	3,023.90	2,642.77
Illustrations	2,618.21	2,832.56
Advertising discounts and collection expense	3,385.20	3,541.00
Sundry	1,539.42	1,597.12
TOTAL	$216,900.10	$211,995.94

TRUSTEES OF THE CALIFORNIA MEDICAL ASSOCIATION

(A Nonprofit Corporation)

Exhibit A

Statement of Net Assets, June 30, 1959

ASSETS:		
Cash		$ 266,073.38
Cash value of life insurance policy surrendered		7,039.50
United States Treasury Bonds (at maturity value)—Pledged (Note 1) (market value, $937,566)		1,121,000.00
Accrued interest receivable		2,761.46
Receivable from Central California Blood Bank (unpaid balance, $70,000)—Cost		55,000.00
Capital stock of Pacific Magnetic Tape Equipment Co., 900 shares (Note 2)		9,000.00
Deposit on purchase of real estate (Note 3)		26,658.00
Cash surrender value of life insurance policies held in trust for California Medical Association employees		83,126.70
Prepaid insurance		117.99
TOTAL ASSETS		$1,570,777.03
LIABILITIES:		
Notes payable—Secured (Note 1)		$ 270,000.00
Accounts payable		4,242.94
Trust Fund for California Medical Association Employees (Note 4)		116,126.70
Other Trust Funds		10,883.54
TOTAL LIABILITIES		$ 401,253.18
NET ASSETS		$1,169,523.85
CONSISTING OF:		
Contributed assets	$882,915.99	
Excess of income, over expenditures, Exhibit B	286,607.86	
TOTAL		$1,169,523.85

Exhibit B

Statement of Income and Expenditures for the Year Ended June 30, 1959

INCOME:		
Interest on United States Treasury Bonds		$ 29,561.46
Interest on notes and contract		3,236.62
TOTAL		$ 32,798.08
EXPENDITURES:		
Interest on loan	$ 1,011.45	
Fees	820.00	
Other	295.84	
TOTAL		2,127.29
REMAINDER		$ 30,670.79
ADD—CASH VALUE OF LIFE INSURANCE POLICY SURRENDERED		7,039.50
TOTAL		$ 37,710.29
DEDUCT:		
Net premiums on life and retirement insurance policies	$18,901.00	
Provision for the retirement or other benefit of an employee of an affiliated organization	3,000.00	21,901.00
EXCESS OF INCOME OVER EXPENDITURES:		
Current year		$ 15,809.29
Balance at beginning of year		270,798.57
BALANCE AT END OF YEAR		$286,607.86

NOTES TO FINANCIAL STATEMENTS, JUNE 30, 1959

Note 1: United States Treasury Bonds with a maturity value of $1,121,000 have been pledged as security for notes payable to the Crocker-Anglo National Bank in the amount of $270,000 which are due during September, 1959.

Note 2: The Trustees own all of the outstanding stock of the Pacific Magnetic Tape Equipment Co., which was formed for the purpose of merchandising magnetic tape equipment as an adjunct to the activities of the Audio-Digest Foundation, a wholly-owned subsidiary of the California Medical Association. An unaudited financial statement of the Pacific Magnetic Tape Equipment Co. as of June 30, 1959, reflects the net worth to be $14,094.39 at that date.

Note 3: Subsequent to June 30, 1959, the Trustees completed the purchase of the property at 693 Sutter Street, San Francisco, for a total consideration of $325,000 which included assuming liability for the $102,292.21 balance due on a mortgage loan held by The Connecticut Mutual Life Insurance Company secured by a deed of trust on the property.

Note 4: The portion of the Trust Fund for California Medical Association Employees applicable to the retirement or similar benefit to Mr. and Mrs. Ben H. Read amounting to $33,000 at June 30, 1959, has not been segregated from other assets of the corporation as directed by Chapter XVII of the By-Laws of the Corporation, which states: ". . . All assets of this fund shall be held separate and apart from all other assets and property of the Corporation. . . ."

PHYSICIANS' BENEVOLENCE FUND, INC.

(A Nonprofit Corporation)

Exhibit A

Statement of Net Assets, June 30, 1959

ASSETS:		
Cash—Crocker-Anglo National Bank		$ 7,172.02
Investments:		
U. S. Treasury Bonds—2½% (at maturity values):		
Due December 15, 1969	$10,000.00	
Due December 15, 1972	34,000.00	
TOTAL (MARKET VALUE, $36,806.00)	$44,000.00	
U. S. Treasury Bills—$65,000.00 face value, due September 1959 (at cost)	64,461.65	
TOTAL INVESTMENTS		108,461.65
Accrued interest		116.53
TOTAL ASSETS		$115,750.20
LIABILITIES—DUE CALIFORNIA MEDICAL ASSOCIATION		250.00
NET ASSETS		$115,500.20
CONSISTING OF:		
Contributed assets	$92,132.28	
Excess of income over expenditures, Exhibit B	23,367.92	
TOTAL		$115,500.20

Exhibit B

Statement of Income and Expenditures for the Year Ended June 30, 1959

INCOME:		
Contributions received:		
California Medical Association (see note)	$16,195.25	
The Woman's Auxiliary to the California Medical Association	2,435.94	$18,631.19
Interest earned:		
On U. S. Treasury Securities (including $116.53 accrued)	$ 1,960.45	
On loan	375.00	2,335.45
TOTAL		$20,966.64
EXPENDITURES:		
Payments to beneficiaries	$15,745.00	
Other	250.00	
TOTAL		15,995.00
EXCESS OF INCOME OVER EXPENDITURES:		
Current year		$ 4,971.64
Balance at beginning of year		18,396.28
BALANCE AT END OF YEAR		$23,367.92

NOTE: The constitution of the California Medical Association, Article IV, Section 6, was amended in May, 1956, and provides: "At least $1.00 out of the annual dues paid by each active member of the Association shall be allocated to the Physicians' Benevolence Fund, Inc., a corporation, and shall be used for the purposes as set forth in that corporation's Articles and By-Laws."

COMMITTEE ON HISTORY AND OBITUARIES

To the President and the House of Delegates:

Since the last report of this committee there have appeared in CALIFORNIA MEDICINE obituary notices of 157 members. This included a 12-month period, December 1, 1958 to December 1, 1959.

Among those departed in this year were three who had rendered outstanding service to the California Medical Association. Emma W. Pope will be remembered as our tireless and efficient secretary for many years in the nineteen-twenties and thirties. Better known to the present membership were Alson Kilgore and Chester L. Cooley, two who labored long and successfully to make California Physicians' Service a reality.

Respectfully submitted,

J. MARION READ, *Chairman*
Committee on History and Obituaries

LIAISON COMMITTEE WITH CALIFORNIA HOSPITAL ASSOCIATION

To the President and the House of Delegates:

The committee has been developing a statement of Guiding Principles for Physician-Hospital Relationships.

Its purpose is to implement the use of quality control standards in order to insure continued improvement of medical care in hospitals.

We have met with representatives of the California Hospital Association and they have assured us that they will enthusiastically support our principles.

It is hoped that this work can be completed and the principles submitted to the House of Delegates at the Annual Session in February, 1960.

Respectfully submitted,

FRANCIS E. WEST, *Chairman*
Liaison Committee with California Hospital Association

LIAISON COMMITTEE WITH STATE BAR OF CALIFORNIA

To the President and the House of Delegates:

During the year, these committees have met once and have plans to meet again in January, 1960.

The development of the medical malpractice panels in Los Angeles, San Diego and San Francisco, has been studied. It would appear that they are being used properly and are approved generally by members of both professions. Representatives of the two professions in other counties are studying the matter of further use of the panels.

Through the adoption of interprofessional codes recommended by these committees, several county medical societies have reported that they have met with their local bar association representatives and adopted interprofessional guides for the two professions. Your committees have continued to encourage such activity.

During the past session of the legislature, several matters of mutual interest to the two professions arose which were discussed by the liaison representatives. It is believed by your committees that there continue to be matters of policy which both professions should study. The Joint Liaison Committees offer a ready means for such activity.

Respectfully submitted,

Francis E. West, *Chairman*
Liaison Committee with
State Bar of California

MEDICAL EXECUTIVES CONFERENCE

To the President and the House of Delegates:

The Medical Executives Conference, composed of administrative and executive employees of the various county medical societies and the California Medical Association (originally organized as an Advisory Planning Committee to the C.M.A.), outlined and presented its objectives to the Council in March. They were as follows:

(a) To serve as a vehicle whereby the California Medical Association staff may communicate directly with county society executives and members of the county societies, and as a vehicle for transmitting problems of county societies through their executives to the California Medical Association.

(b) To serve as a channel through which county societies and their executives may exchange problems and solutions directly among themselves.

(c) To serve as a forum in which general problems affecting medicine may be brought to the attention of executive secretaries and others employed in the service of medicine.

(d) To give opinion and counsel to the California Medical Association staff.

Our monthly meetings successfully served these purposes. Periodic reports were heard and discussed on topics of major concern to medicine in the legislature and economic spheres, and problems of county societies were presented and discussed with view to expeditious solution.

Monthly meetings also presented guest speakers on subjects of interest to medical society executives on a state and county level. The timing of these meetings, held prior to each C.M.A. Council meeting, permits the county executives to meet with the Council and keep themselves apprised on all matters discussed by that body.

Respectfully submitted,

William K. Scheuber, *Chairman*
Medical Executives Conference

CONSTITUTION STUDY COMMITTEE

To the President and the House of Delegates:

The Constitution Study Committee, which had been inactive for one year, was reactivated by the 1959 House of Delegates and was assigned several items for study and report. In addition, meetings of the committee brought out some sections of the Constitution and By-Laws of the California Medical Association which appeared to warrant study, and the Council of the Association requested the committee to review a proposed amendment to the Constitution which is currently lying on the table, to be voted on at the 1960 House of Delegates.

These items are here discussed individually:

Resolution No. 2 of the 1959 House of Delegates: This resolution asked the Constitution Study Committee to review the provisions of Chapter III of the By-Laws, with a view toward recommending amendments which would limit the authority of the Judicial Commission of the California Medical Association.

The committee discussed this resolution at length and conferred with Doctor Donald Charnock, chairman of the Judicial Commission, and Mr. Howard Hassard, legal counsel, in regard to it.

Chapter III of the C.M.A. By-Laws is a long and detailed outline of the procedures, authorities and punishments to be used in cases where a member of the Association is subjected to self-discipline applied by the organization in cases involving alleged breach of the Principles of Medical Ethics.

The language of the section was developed by legal counsel a number of years ago in an effort to provide for internal discipline which would, simultaneously, assure proper discipline for erring members and satisfy the courts of the state as to its legal adequacy.

The courts have held for many years that membership in a medical association, once conferred, becomes a property right in that it involves intangible values, including prestige, eligibility for continuing educational opportunities, eligibility for certain types of insurance coverage, etc. As a property right of the individual member, membership cannot legally be revoked or otherwise impeded without due process of law as provided under Article XIV of the Constitution of the United States.

Where internal disciplinary proceedings are recognized by the courts, the rule of law is that a member subjected to discipline within his organization cannot appeal to the civil courts of the state until he has exhausted his legal remedies within the organization. Accordingly, it is important that the member be given adequate safeguards of his rights under the rules imposed in the By-Laws and that these rights be recognized by those bodies within the Association which administer the disciplinary provisions of the By-Laws.

It is interesting to note that in those disciplinary cases in the California Medical Association which have subsequently gone before the courts of the state, the procedures and safeguards written into the By-Laws have consistently been approved by the courts.

Chapter III of the By-Laws differs from other parts of this document in that it must combine the machinery for disciplining members for infractions of the Principles of Medical Ethics with the requirements of our courts of law. It is for this reason that the chapter has been carefully prepared by legal counsel.

The chapter gives the procedures to be followed by county societies in bringing charges against their members and adds the provisions for appeals to the California Medical Association. In addition, a member who wishes may appeal further to the Judicial Council of the American Medical Association; that body, however, is limited to a review of the procedures followed by the county and state associations

and is not permitted to review the facts in any case on appeal. For this reason it appears advantageous that the state association have the authority to review not only procedures but also facts. If this provision were not made, disciplinary cases could easily be taken into the courts of law direct from county society decisions and this course might prove to be both costly and damaging to the good name of the medical profession.

Assistance is available to the county medical societies from C.M.A. staff personnel when disciplinary cases are scheduled. Such assistance will aid the county societies in observing the legal and technical requirements of these proceedings.

The committee recommends that no major changes be made in the provisions of Chapter III of the By-Laws but that two minor amendments to this chapter be introduced in the House of Delegates, one to set a maximum period of suspension of members and the other to eliminate the accumulation of dues obligations for suspended members. These amendments have been prepared for introduction.

Resolution No. 6 of the 1959 House of Delegates: This resolution called for the holding of meetings of the committee in both the northern and southern parts of the state, with county society representatives of the adjacent societies invited to attend these meetings to express their views on possible redistricting of California for purposes of representation on the Council.

A meeting was held in Los Angeles on September 13, 1959, and one in San Francisco on October 4, 1959, to which county society representatives were invited. Representatives of ten county societies attended these meetings.

From discussions in the committee and statements made by county society representatives, it appeared that there was general satisfaction at this time with the boundaries of the ten councilor districts. The notable exception was in Orange County, where a rapid growth of membership has taken place in recent years and where officers of the county society expressed the wish to have the county named as a councilor district in its own right. Further consideration of this request brought out the fact that the growth of membership in Councilor District No. 2, which includes Orange County as well as Imperial, Riverside, San Bernardino, Inyo and Mono counties, is advancing at a rate where the district will doubtless be entitled to an additional councilor within a short time. While this addition might not arise as rapidly as an amendment to the Constitution could become effective, it was the opinion of the committee that singling out any one county society as an additional councilor district on a preferential basis would not be good policy. The committee believes that additional councilor offices should come into being by an evolutionary process of growth as physician population increases.

The committee also wishes to point out that Resolution No. 6 referred to the recommendations made in the Heller Report for redistricting. The committee was informed that the Heller recommendations had been considered by the Council, had been found to be impractical, and that no further consideration was being given them at this time.

The committee recommends, therefore, that no change be made at this time in the councilor district boundaries.

Proposed Constitutional Amendment: At the request of the Council, the committee considered the terms of an amendment to the Constitution introduced in 1959 by Doctor Olson of Santa Barbara County and now lying on the table. This amendment would debar from any office or committee of the Association any member who held any position with any insurance carrier handling health and accident insurance or who held any remunerative position, elective or appointive, in any political subdivision.

It was the unanimous opinion of the committee that this proposed amendment should be opposed because it would eliminate from a number of positions in the Association members whose experience is helpful to the Association or those whose participation in legislative, school and other political activities represents a valuable contribution both to the public and the medical profession. The committee recognizes that this opinion is advisory only, since a reference committee in the 1960 House of Delegates must report to that body. However, the opinion is expressed here and members of the committee plan to appear before the reference committee to express its views.

Article VIII, Section 3, of Constitution: The committee reviewed the provisions of this section and voted to introduce proposed amendments to clarify the intent of the section and to improve its language.

The language of the section, as amended in 1959, uses the words "session" and "meeting" interchangeably and in conflict with these terms as used in the section prior to amendment. The committee wishes to correct this language in the interest of clarity, even though it is obvious that the section would be interpreted as though the terms had been properly applied in the first place.

It was also the feeling of the committee that where an amendment to the Constitution is presented at the first meeting of a session of the House of Delegates and is referred to the appropriate reference committee at that time, that the reference committee should report back to the current session and should have the opportunity to review and, with the consent of the author of the amendment, modify the language of the amendment and introduce it at the final meeting of the House, so that it might be voted upon a year later.

The committee felt that a proposed amendment to the Constitution might be acceptable in its intent but be improperly or carelessly worded; if such a situation should develop during the hearings of the reference committee, the committee then might work with the author to prepare a modified version of the amendment and have this presented at the final meeting of the House as the item to lie on the table for a vote one year hence. The proposed amendment prepared by the committee will be introduced at the 1960 session of the House of Delegates.

The members of the committee were saddened by the illness of Sam J. McClendon, who was unable to attend committee meetings, but are happy to learn of the improvement in his condition and his return to active pursuits.

Respectfully submitted,

C. J. Attwood,
Acting Chairman
Robb Smith
Edgar Wayburn
Carl M. Hadley
James Moore
Fred Olson
James Yant
Jay J. Crane
Leslie B. Magoon

Constitution Study Committee

Technical Exhibits

Technical exhibits—now commonly referred to as industrial exhibits—will again be housed in the beautiful exhibit rooms on the ground floor of the Ambassador Hotel. This area has been used on several previous occasions and has proved to be extremely popular with exhibitors and physician registrants alike.

Physicians attending the meeting will find assembled in this one area all the newest advances in pharmaceuticals, equipment and services. The exhibitors have agreed to a screening of all their exhibits, in order that physicians may be protected against items of dubious value. All physicians are urged to attend the exhibits on all available occasions.

The exhibitors contribute greatly to the total expenses of the Annual Session through their booth rentals. For this alone, it is incumbent on C.M.A. members to visit them and express their appreciation of their participation. On top of this aspect, however, is the opportunity to keep abreast of the ever-changing preparations, techniques and services which an interested and aggressive industrial group will assemble for inspection. Here is a prime chance to engage in some postgraduate training with a minimum of time and a maximum of convenience.

ABBOTT LABORATORIES — Sunset Room
North Chicago, Illinois — Booth 72

Exhibit will feature the Abbott Laboratories Antibiotic Triad—three products which together provide control of all coccal infections: Erythrocin Stearate, Compocillin-VK and Spontin. Also shown will be Abbott's unique new "metered release dose form" products, Tral Gradumets and Desoxyn Gradumets, plus a selection of other Abbott specialties.

A. S. ALOE COMPANY — Sunset Room
Los Angeles — Booth 67

ALTA-DENA DAIRY — Sunset Room
Monrovia — Booth 36

Certified Milk—Produced to the high standards of the Los Angeles County Medical Milk Commission. Samples will be served of this, verified safe, nutritionally superior, quality milk. One bottle out of every bottling goes to the Medical Milk Commission Laboratory where it is tested daily for bacteria and cleanliness. Alta-Dena Dairies products won 7 gold medals for Certified Raw Milk and other products at the Los Angeles County Fair. Deliveries made everywhere in Los Angeles County, Orange County and Western San Bernardino County. Our products available in Santa Barbara, Fresno, Berkeley and San Francisco.

Representatives will answer questions, some definite suggestions may be gained where milk feeding problems are encountered.

AMERICAN STERILIZER COMPANY — Sunset Room
Erie, Pennsylvania — Booth 47

AMES COMPANY, INC. — Boulevard Room
Elkhart, Indiana — Booth 105

Featured at the Ames Company exhibit will be the latest developments in new, simplified diagnostic products, which are adaptable to routine examination and patient management. The many advantages of the new diagnostic products are quickly demonstrable, and you are cordially invited to stop at the Ames booth to see them.

ARMOUR LABORATORIES — Boulevard Room
Chicago, Illinois — Booth 85

AUDIO-DIGEST FOUNDATION — Sunset Room
Glendale — Booth 60

Audio-Digest Foundation (a non-profit subsidiary of the California Medical Association) gives the busy physician a time-saving tour through the best of some 600 current medical journals, plus the highlights of scores of national meetings. Time-proven, but still unique, these medical tape-recorded services are now offered in six series—General Practice (issued weekly and bi-weekly), and Pediatrics, Internal Medicine, Surgery, Obstetrics and Gynecology, Anesthesiology (all issued semi-monthly). The one-hour long tapes are selected and reviewed by a professional Board of Editors. Digest subscribers listen in their car, home or office. The Foundation also offers medical lectures by nationally recognized authorities.

BARNES-HIND LABORATORIES — Sunset Room
Sunnyvale — Booth 55

Barnes-Hind Laboratories, Inc. will display the Heb-Cort Series of Products: Heb-Cort ½%; Heb-Cort 1%; Heb-Cort N; Heb-Cort V. These adrenocorticosteroid preparations have been shown to be extremely effective in various dermatological disorders, where Hydrocortisone, with or without, Neomycin Sulfate and iodochlorhydroxyquin are indicated for topical application.

Barnes-Hind Tranquinal, the daytime sedative, recommended for use with patients in need of "simple sedation" without drowsiness or hang-over effect, will also be shown at the Barnes-Hind Booth.

DON BAXTER, INC. — Boulevard Room
Glendale — Booth 95

Don Baxter, Inc. presents the most complete parenteral system in the world. Especially featured will be:

Peritoneal Dialysis solution with complete administration equipment which greatly simplifies the procedure with a high degree of safety.

Novex, the exclusive expendable stopcock that opens new vistas in intravenous fluid administration control.

Stylex, the finest precision-made, expendable syringe now available in a wide range of sizes and needle combinations.

BEECH-NUT LIFE SAVERS, INC. — Sunset Room
Canajoharie, New York — Booth 46

You are cordially invited to visit the Beech-Nut exhibit and become acquainted with the complete line of Beech-Nut Baby Foods.

Nutritionists will be present to tell you about the new Meat and Vegetable Dinner Combinations—both strained and Junior.

Members of the Nutrition Staff will welcome the opportunity of answering any questions on the Beech-Nut Baby Foods.

M. J. BENJAMIN — Sunset Room
Los Angeles — Booth 56

BORCHERDT COMPANY — Boulevard Room
Chicago, Illinois — Booth 98

Two time-tested products are being shown at this meeting.

MALT SOUP EXTRACT for constipation and intractable pruritus ani. This product acts on the intestinal flora to produce a predominantly aciduric flora.

UROLITIA is a mild soothing urinary antiseptic for geriatric patients. Register for samples and information on these products.

BURROUGHS WELLCOME & CO., INC. — Sunset Room
Tuckahoe, New York — Booth 74

The extensive research facilities of 'B. W. & Co.', both here and in other countries, are directed to the development of improved therapeutic agents and techniques. Also much basic theoretical work in our laboratories and in cooperation with internationally known institutions is contributing to the reservoir of fundamental medical knowledge.

Through such research 'B. W. & Co.' had made notable advances related to leukemia, malaria, diabetes, and diseases of the autonomic nervous system; and to antibiotic, muscle-relaxant, antihistaminic, and antinauseant drugs.

An informed staff at our booth will welcome the opportunity to discuss our products and latest developments with you.

CAMEL CIGARETTES — Boulevard Room
Winston-Salem, North Carolina — Booth 99

CAMERON SURGICAL INSTRUMENTS CO. — Boulevard Room
Chicago, Illinois — Booth 89

Cameron shows their new office size 255 Electro-Surgical Unit, the complete office unit ideally suited for your practice—cuts, coagulates. Wide range of accessories available —snares, suction coagulation electrodes (for epistaxis, etc.). Also showing Cameron rectal instruments, otoscopes, ophthalmoscopes, binocular loupes, grasping forceps, Cameron-Lempert headlites, mirrolites and many other items of interest.

You will find your visit worthwhile and informative.

S. H. CAMP & COMPANY — Boulevard Room
Jackson, Michigan — Booth 103

There are many new and interesting developments in Camp Appliances and Supports on display. A few minutes spent here will permit a Camp representative to bring you up to date on the latest new and improved products adaptable in your practice. Your patients will benefit from Camp's low prices and high standard of quality; the ease of local procurement through established stores with trained fitters to serve you and your patients. A cordial welcome awaits you.

CANRIGHT CORPORATION — Ballroom
Glendale — Booth 9

DIGESTANT (Canright) is a favorite of many physicians. Samples and literature are available at our booth.

HEMAFOLATE, a high potency hematinic, is another favorite and we will gladly send supplies for your testing and approval.

Thank you for stopping by and visiting with us.

CHICAGO PHARMACAL COMPANY — Boulevard Room
Chicago, Illinois — Booth 107

URISED: Nationally known and clinically proven tablet for both comfortable sedation and thorough antisepsis for all types of genito-urinary affections.

JUNIPLEX: An excellent tasting liquid tonic for both children and adults which contains all the essential minerals as well as the entire B complex plus 30 micrograms of B_{12} per teaspoonful.

NOSCOLINE: New antitussive, antipyretic, decongestant cold tablet.

GER-AMINO: A geriatric nutritional-hormonal supplement containing the essential amino acids in tablet form for the arrest and prevention of the "geriatric syndrome."

ESTROSED: Tablet combining reserpine and ethinylestradiol for treatment of the menopausal syndrome.

RESYDESS: For reducing body weight without inducing nervousness or lethargy.

CIBA PHARMACEUTICAL PRODUCTS, INC. — Sunset Room
Summit, New Jersey — Booths 53 and 54

THE COCA-COLA COMPANY — Sunset Room
Atlanta, Georgia — Booth 42

Ice-cold Coca-Cola served through the courtesy and cooperation of the Coca-Cola Bottling Company of Los Angeles and The Coca-Cola Company.

CORECO RESEARCH CORP. — Sunset Room
New York, New York — Booth 62

The Coret Camera embodies the principle of electronic flash and constant automatic control of such factors as distance, aperture, field, and exposure. Now, for the first time, Coreco offers a completely automatic professional clinical camera purposely designed to achieve the ultimate in surface, intra-oral, and intra-tubular photography. Because of the simplicity of operation, even an inexperienced doctor or nurse can achieve consistently perfect color transparencies.

CUTTER LABORATORIES — Sunset Room
Berkeley — Booth 70

Cutter Laboratories will feature its latest blood fraction "Hyper-Tet" (tetanus immune globulin) as well as other fraction specialties—Hypertussis, Hyperotin and Polio Immune Globulin. In the pediatric line Cutter will feature their new anti-colic preparation Barbicaine and new antifungal By-na-mid in four different forms.

DARWIN LABORATORIES — Sunset Room
Los Angeles — Booth 33

LH 400 (LIPO-HEPIN), sodium heparin U.S.P., 400 mgs./cc., allows a significant increase in efficiency of anticoagulant and lipoprotein lipase response. Administration and control problems, usually associated with heparin therapy, are essentially eliminated. Other heparin concentrations and other products will be discussed.

DESITIN CHEMICAL COMPANY — Sunset Room
Providence, Rhode Island — Booth 73

DESITIN OINTMENT: For treatment of burns, ulcers, diaper rash, abrasions, etc.

DESITIN POWDER: Relieves chafing, sunburn, diaper rash, etc.

DESITIN SUPPOSITORIES and RECTAL OINTMENT: Relieves pain and itching in uncomplicated hemorrhoids, fissures.

DESITIN BABY LOTION: Protective, antiseptic.

DESITIN ACNE CREAM: A non-staining, flesh-tinted "Medicream" for the treatment of Acne Vulgaris.

DESITIN COSMETIC AND NURSERY SOAP: Supermild.

DESITIN SUPPOSITORIES WITH HYDROCORTISONE: Prompt response to inflammatory conditions in proctitis, severe pruritus, edema.

DEVEREUX FOUNDATION — Boulevard Room
Santa Barbara — Booth 75

THE DIETENE COMPANY — Ballroom
Minneapolis, Minnesota — Booth 26

Have you tasted MERITENE . . . the *Protein*-Vitamin-Mineral Supplement that DOES taste good? Visit our booth, enjoy a Meritene milk-shake with its multiple nutritive values.

While you're there, review the Dietene Diet based on DIETENE Reducing Supplement. It provides the rare combination of low calories (1000) with high intake of protein and all essential vitamins and minerals in an interesting, effective SAFE weight reducing diet.

DOHO CHEMICAL CORPORATION — Ballroom
New York, New York — Booth 13

AURALGAN: Otitis Media and removal of Cerumen.

OTOSMOSAN: Fungicidal and Bactericidal in the suppurative and aural dermatomycotic ears.

RHINALGAN: Nasal decongestant free from systemic or circulatory effect.

LARYLGAN: Throat spray and gargle for infectious and non-infectious sore throat involvements.

Mallon Chemical Corporation, Division of DOHO:

RECTALGAN: For relief of pain and discomfiture in hemorrhoids, pruritus and perineal suturing.

DERMOPLAST: An aerosol spray for surface pain, burns and abrasions; Obs. and Gyn. use.

DUKE LABORATORIES, INC. — Sunset Room
South Norwalk, Connecticut — Booth 35

Exhibiting their specialty products—Elastoplast bandages, cotton woven, adhesive surfaced, stretchable. Elastoplast Unit Dressings: Gelocast, prepared Unna-paste bandage; Nivea Creme, Nivea Skin Oil and Basis Soap for patients with dry, sensitive skin.

EATON LABORATORIES — Ballroom
Norwich, New York — Booth 28

Fewer treatment failures in bacterial pneumonias, bronchiolitis, bronchitis, tonsillitis, otitis media, soft tissue infections, cellulitis and abscesses, surgical wound infections and infected lacerations with Altafur, brand of furaltadone, the first nitrofuran effective orally in systemic bacterial infections.

Antimicrobial range of Altafur encompasses the majority of common infections seen in everyday office practice and in the hospital; decisive bactericidal action against staphylococci, streptococci, pneumococci, coliforms; sensitivity of staphylococci in vitro (including antibiotic-resistant strains) has approached 100%; development of significant bacterial resistance has not been encountered; low order of side effects; does not destroy normal intestinal flora nor encourage monilial overgrowth (little or no fecal excretion).

EISELE & COMPANY — Sunset Room
Nashville, Tennessee — Booth 49

Eisele & Company will display their regular line of clinical thermometers, hypodermic syringes, both the regular type and the interchangeables: hypodermic needles, ECO bandages and specialty glassware.

ENCYCLOPAEDIA BRITANNICA — Sunset Room
Los Angeles — Booth 43

ENCYCLOPEDIA AMERICANA — Boulevard Room
San Marino — Booth 104

New Edition—Encyclopedia Americana.

CHARLES O. FINLEY & CO. — Sunset Room
Los Angeles — Booth 31

Representatives of Charles O. Finley & Co., administrators of the California Medical Association group disability insurance program, will be on hand to describe the program to eligible members and to answer your questions. You are invited to come in, sit down and relax.

C. B. FLEET CO., INC. — Boulevard Room
Lynchburg, Virginia — Booth 84

Fleet will feature CLYSMATHANE, its most recent contribution in the field of medication by rectum—an advanced method of xanthine therapy. CLYSMATHANE is a stable solution of theophylline monoethanolamine; easily retained; rapid and uniform absorption, prompt and predictable blood levels; with no rectal irritation after prolonged use. CLYSMATHANE, in a disposable rectal unit, makes self administration easy any time and any place—and assures prompt therapeutic blood levels. Examine the unit and ask that samples and literature be mailed to your office.

FOREMOST DAIRIES, INC. — Sunset Room
San Francisco — Booth 66

FOREMOST "Fresher Tasting" Evaporated Milk is the first to be processed by High-Temperature Short-Time sterilization, "flash cooled," then sealed into plastic lined sterilized cans to protect its fresher flavor.

FOREMOST "Fresher Tasting" Evaporated Milk possesses all the quality and nutrition found in the best evaporated milks plus—Flavor—Color—and Aroma akin to fresh homogenized milk.

FOREMOST infant feeding formulas make sweeter babies —no canned milk breath!

On request, nutritional data and samples of FOREMOST will be mailed to your office or home.

Refreshing "Egg Nog" made from this modern product will be served at the booth.

E. FOUGERA & COMPANY — Boulevard Room
New York, New York — Booth 94

GEIGY PHARMACEUTICALS — Ballroom
Yonkers, New York — Booth 24

GEIGY PHARMACEUTICALS cordially invites Members and Guests of the Association to visit its technical display. Tofranil, a new agent, specifically for depression, will be featured. Information on other products valuable in the therapy of rheumatic, metabolic, dermatologic and cardiovascular diseases will be presented by personnel in attendance.

GENERAL FOODS CORPORATION — Sunset Room
White Plains, New York — Booths 38 and 39

GERBER PRODUCTS COMPANY — Sunset Room
Fremont, Michigan — Booth 32

GREAT BOOKS OF THE WESTERN WORLD — Ballroom Foyer
Chicago, Illinois — Booth 4

Published and presented by Encyclopaedia Britannica, in collaboration with the University of Chicago. This new publication represents the accumulated wisdom of the 3,000 years of our civilization and includes the revolutionary idea-index called the SYNTOPICON—an ingenious new literary invention making readily available and easily accessible all the wisdom and the knowledge contained in the Great Books. These volumes contain the works that are indispensable to the liberal education of a free man in the twentieth century. They are the writings that are essential in the library of every thinking person.

THE G. F. HARVEY COMPANY, INC. — Sunset Room
New York, New York — Booth 61

The G. F. Harvey Company will welcome members of the medical profession at our exhibition of leading specialties and new products.

Representatives will be in attendance to answer any questions you may have.

Harvey recently introduced a number of new products which representatives at the exhibit will describe and give information on the results of clinical reports.

Among the products featured will be Paremycin Elixir, a new Duoclassic Antidiarrheal. Paremycin Elixir combines for the first time the two most effective antidiarrheal agents, tincture opii and neomycin sulfate, in a convenient dosage form, and A-C-K Buffered, a unique analgesic combination.

H. J. HEINZ COMPANY — Boulevard Room
Pittsburgh, Pennsylvania — Booth 97

HEINZ BABY FOODS announces these new varieties; attractively packaged new recipes of five pre-cooked cereals—Rice, Barley, Oatmeal (these three are milk, wheat and egg-free), Mixed and High Protein; strained pineapple juice with vitamin C added; strained and junior tutti frutti dessert and two high meat dinners—Chicken a la King and Chicken with Rice. Easy screw-on caps are on most of Heinz Baby Foods now.

Recently published literature includes our colorful, photographic presentation of "An ABC's for Baby's Mealtime," up-to-date lists of Heinz Baby Foods and a list of wheat, egg, milk and citrus-free baby foods among our varieties.

HOLLAND-RANTOS COMPANY, INC. — Ballroom
New York, New York — Booth 27

Featured at the H-R exhibit: Specific antimycotic, nonmessy *Hyva Gentian Violet Vaginal Tablets.* Also trichomonicidal, fungicidal and bactericidal improved *Nylmerate Jelly* and *Nylmerate Antiseptic Solution Concentrate* for vaginal trichomoniasis and mixed infections.

Hollandex Silicone Ointment with Natural Vitamins A & D—medication for neuro- and contact-dermatitis, decubitus ulcers, diaper rash, skin dryness, chafing, etc.

Special Koromex A for use where "jelly alone" is indicated for conception control; also mechanical advantages of contouring *Koro-Flex Diaphragms,* along with standard *Koromex Jelly, Cream, Diaphragms* and *Sets.*

JACKSON-MITCHELL PHARMACEUTICALS, INC.
Culver City — Sunset Room—Booth 41

Jackson-Mitchell Pharmaceuticals, Inc. will exhibit both MEYENBERG POWDERED and EVAPORATED GOAT MILK as well as HI-PRO, our hi-protein, low fat powdered cow's milk. We will be featuring powdered goat milk which is palatable as well as portable. MEYENBERG POWDER is extra convenient for traveling and costs the patient less. Like MEYENBERG EVAPORATED MILK, MEYENBERG POWDERED GOAT MILK is a medication of choice for cow's milk allergy. Because MEYENBERG POWDERED tastes just like daily-fresh milk, the transition from cow's milk to goat's milk is a naturally simple one. Powdered or evaporated, MEYENBERG GOAT MILK is nutritionally equal to cow's milk in protein, fat, carbohydrate and minerals.

ROGER JESSUP CERTIFIED FARM — Boulevard Room
Glendale — Booth 106

JOHNSON & JOHNSON — Boulevard Room
New Brunswick, New Jersey — Booth 83

LEDERLE LABORATORIES — Ballroom
New York, New York — Booth 18

ELI LILLY AND COMPANY — Boulevard Room
Indianapolis, Indiana — Booths 91 and 92

You are cordially invited to visit the Lilly exhibit located in booths 91 and 92. The Lilly sales people in attendance welcome your questions about Lilly products and recent therapeutic developments.

J. B. LIPPINCOTT COMPANY — Ballroom Foyer
Philadelphia, Pennsylvania — Booth 1

J. B. Lippincott Company presents, for your approval, a display of professional books and journals geared to the latest and most important trends in current medicine and surgery. These publications, written and edited by men active in clinical fields and teaching, are a continuation of more than 100 years of traditionally significant publishing.

LOMA LINDA FOOD COMPANY — Sunset Room
Arlington — Booth 58

With the background of years of experience in perfecting a hypoallergenic milk powder, and also a newly developed concentrated liquid milk the protein of which is fully derived from the soy bean and formulated with other essential additives to care for the needs of babies, growing children, and adults, the Loma Linda Food Company will be happy to welcome you to their exhibit. Attendants will be pleased to discuss the values of Soyalac powder and concentrated liquid. Samples of this flavorful product will be served at the exhibit.

P. LORILLARD COMPANY — Sunset Room
New York, New York — Booth 64

P. Lorillard Company invites you to visit the KENT Cigarette Exhibit.

We are presenting the Story of KENT Cigarettes. You will learn about KENT's free and easy drawing Micronite Filter . . . about KENT's exclusive super-porous Micropore Paper which lets cool air in, lets heat escape through microscopic pores . . . and about KENT's 100% natural tobaccos.

In addition, you will learn how KENT has reduced tars and nicotine in the smoke you inhale to the lowest level among all leading brands.

A table cigarette box with your signature in gold will be a pleasant souvenir of your visit to the convention.

LOVÉ BRASSIERE COMPANY — Ballroom
Hollywood — Booth 21

MAGNUSON X-RAY COMPANY — Boulevard Room
Los Angeles — Booth 80

Stop by our booth and see the PROFEXRAY "ROCKET" 300 MA combination radiographica and fluoroscopic x-ray unit.

MAICO ELECTRONICS, INC. — Boulevard Room
Minneapolis, Minnesota — Booth 96

MALTBIE LABORATORIES — Sunset Room
Belleville, New Jersey — Booth 65

Maltbie Laboratories Division of Wallace & Tiernan, Inc. features the new dermatologic ointment, CALDECORT, containing calcium undecylenate, hydrocortisone and neomycin for a comprehensive therapy of skin conditions caused by fungi, bacteria or allergy. Also exhibited are: DESENEX, most widely prescribed for athlete's foot; NESACAINE, a safe, potent and rapid-acting local anesthetic; BIFRAN, for the management of the overweight patient; and CHOLANS, for the treatment of heptobiliary dysfunction.

S. E. MASSENGILL COMPANY — Boulevard Room
San Francisco — Booth 100

MEAD JOHNSON & COMPANY — Ballroom
Evansville, Indiana — Booth 17

The Mead Johnson exhibit has been arranged to give you the optimum in quick service and product information. To make your visit productive, specially trained representatives will be on duty to tell you about their products.

MEDICAL PLASTICS LABORATORY — Ballroom
Gatesville, Texas — Booth 8

Life-size, authentic anatomical specimens in plastic. X-ray opaque, of true bone color, texture and appearance. Anatomically correct in all details; unbreakable in normal use, washable and repairable. Skeleton, finest quality with soft vinyl intervertebral discs. Lumbar Spine with sacrum, coccyx, dura, and portraying herniated disc. Pelvis, female, medium sized. Heart, life-sized, shows detail inside and outside, including valves, auricles, ventricles, surface veins and arteries. The most normal, understandable reproduction. Other invaluable teaching and patient demonstration aids.

THE MEDICAL PROTECTIVE COMPANY — Ballroom
Fort Wayne, Indiana — Booth 11

"The Doctor and The Law," originated in the Law Department of The Medical Protective Company and issued periodically to its policyholders, is but one of the many prophylactic procedures that supplement effective defense and unparalleled experience from the handling of some 80,000 professional liability claims and suits to achieve greater security for the doctor in his practice. Per capita incidence of claims and suits for the past ten years has been downward. Specialized Service makes our doctor safer.

MERCK SHARP & DOHME — Ballroom
Philadelphia, Pennsylvania — Booth 19

WM. S. MERRELL COMPANY — Boulevard Room
Cincinnati, Ohio — Booth 87

MILEX-FERTILEX CO. — Sunset Room
Los Angeles — Booth 68

MILLER SURGICAL COMPANY — Boulevard Room
Chicago, Illinois — Booth 108

Electro-Surgical and Diagnostic Specialties. Featuring the Rudolph V. Gorsch, M.D., line of Rectal Scopes for Surgical and Diagnostic procedures. A new Electro-Scalpel having the prime features of the larger hospital units which gives hospital efficiency in your office; light weight and portable. Immediate delivery. West Coast service from our local branches.

THE C. V. MOSBY COMPANY — Boulevard Room
St. Louis, Missouri — Booth 93

New knowledge, new ideas, new research and technique—all are waiting for you in the newest Mosby books for 1959 and 1960. Come in. Look over these books at your leisure and convenience. If you wish his assistance, our experienced representative will be happy to discuss any book with you.

THE NETTLESHIP COMPANY — Ballroom
Los Angeles — Booth 14

Administrators of Professional Liability, Group Accident and Sickness, and Life Insurance Programs for County Medical Associations in Southern California.

Qualified representatives available to discuss problems pertaining to hospital or individual professional liability coverage, accident and sickness, life, or other types of insurance.

Literature, which will assist in the prevention of claims and various forms to be used to protect, as far as possible, against malpractice claims.

NORDSON PHARMACEUTICAL LABORATORIES, INC. — Sunset Room—Booth 69
Irvington, New Jersey

ERGOMAR, a new form of specially processed ergotamine tartrate specifically for sublingual administration in the treatment of recurrent and throbbing type vascular and migraine headache. By-passing the gastric and hepatic enzymatic barriers, ERGOMAR insures more rapid relief and avoids gastric upset. Also featured—LEVONOR, the non-stimulating appetite suppressant. LEVONOR's smooth action permits use even during the late evening hours without disturbing sleep. Latest reprints are available on FERRONORD LIQUID and tablets, a chelate hematinic providing rapid hemoglobin response without side effects.

HERMIEN NUSBAUM & ASSOCIATES — Boulevard Room
Chicago, Illinois — Booth 101

ORGANON INCORPORATED — Boulevard Room
Orange, New Jersey — Booth 102

Physicians are cordially invited to visit the Organon booth for information on useful therapeutic specialties. Included among these will be: DURABOLIN, a new, safe, potent, long-acting biologic stimulant indicated in all conditions where a tissue-building action is desired. DURABOLIN provides its potent tissue-building effects without the drawbacks and dangers characteristic of tissue-building steroids. No masculinization occurs in recommended dosages. No progestational effects can occur. CORTROPHIN-ZINC, the long-acting aqueous ACTH indicated for the relief of allergic and inflammatory disorders. Organon representatives will gladly discuss these specialties with all interested physicians.

ORTHO PHARMACEUTICAL CORPORATION — Ballroom
Raritan, New Jersey — Booth 29

At booth 29 ORTHO is proud to present its new blood clot dissolving agent, ACTASE Fibrinolysin (Human). Indicated specifically in thrombophlebitis and pulmonary embolism, ACTASE is a naturally derived blood fraction. ORTHO representatives on hand will be happy to discuss this important new development as well as our other well-known products.

PARKE, DAVIS & COMPANY — Ballroom Foyer
Detroit, Michigan — Booth 6

Medical Service members of our staff will be in attendance at our booth to discuss important Parke-Davis specialties which will be on display.

PERSON & COVEY, INC. — Boulevard Room
Glendale — Booth 77

Person & Covey representatives will be on hand to discuss our most recent medical specialties with you.

PERSONAL PRODUCTS CORPORATION — Sunset Room
Milltown, New Jersey — Booth 44

MODESS TAMPONS . . . *Flexible*, embodying a new design principle, will be featured. Because this tampon has controlled flexibility, normal vaginal pressures (approximately ¾ lb. a sq. in.) curve the tampon across the tract, intercepting all lines of flow.

PHARMACIA LABORATORIES, INC. — Sunset Room
New York, New York — Booth 48

Pharmacia Laboratories, Inc., 501 Fifth Avenue, New York, will exhibit in booth 48, its product, AZULFIDINE, a new sulfa compound for the treatment of ulcerative colitis and regional enteritis. Also, Pharmacia will exhibit PHARMALAX, 'the suppository with enema-like action.' The Quick action of Pharmalax causes defecation through mechanical stimulation of the intestinal musculature by carbon-dioxide released from the suppository. SKOPYL, a new concept in the medical treatment of infant colic, will also be displayed. Literature and important reprints will be available upon request.

PITCHER ELECTRONICS, INC. — Boulevard Room
Brea — Booth 90

The Kol-Therm by Medco, the manufacturer of the Medcosonlator and the Medcolator, will be shown. For the first time, cold is available in a convenient form, plus heat, all from the same unit. The Kol-Therm also makes available automatic contrast treatments.

Pitcher's Ultrasonic Medical Instrument Cleaner will also be shown. Ultrasonic cleaning is the first advance in cleaning techniques in many years. If it's worth sterilizing, it's worth cleaning first. Be sure to see what Ultrasonic cleaning can do for you.

PROFESSIONAL ADVISORY SERVICE — Sunset Room
Los Angeles — Booth 40

THE PURDUE FREDERICK COMPANY — Sunset Room
New York, New York — Booth 50

Senokot: Constipation corrective. Concentrated total senna glycosides which activate Auerbach's plexus, initiate normal neuroperistalsis.

Arthropan—New rapidly absorbed choline salicylate, producing anti-inflammatory, analgesic, antipyretic effects in a short time without gastric irritation.

Cerumenex—An efficient cerumenolytic utilizing action of Cerapon, a new surfactant. For impacted and excessive cerumen.

Soropon—Antiseborrheic for cradle cap; disorganizes protein matrix and emulsifies lipids of crusts, penetrates to exercise antibacterial effect.

Actasal—Highly soluble rapidly absorbed new choline salicylate molecule, for rapid and effective antipyretic and analgesic effects.

Athrombin—Rapid acting, predictable coumarin anticoagulant; makes therapeutic hypoprothrombinemia possible with small induction and maintenance doses.

R. J. REYNOLDS TOBACCO COMPANY — Boulevard Room
Winston-Salem, North Carolina — Booth 99

Welcome to the R. J. Reynolds Tobacco Company Exhibit! You are cordially invited to receive a cigarette case (monogrammed with your initials) containing your choice of CAMEL, WINSTON Filter, Menthol Fresh SALEM, or CAVALIER King Size Cigarettes.

A. H. ROBINS COMPANY, INC. — Ballroom
Richmond, Virginia — Booth 22

Robins' "family" of antiarthritics Pabalate, Pabalate-Sodium Free, and Pabalate-HC (with hydrocortisone) are

co-featured with Donnazyme, the combination of Entozyme and Donnatal components for the complaint of "nervous indigestion" and many symptoms of functional GI disorders complicated by inadequate digestion. Also shown are Robaxin (tablets and the new, fast-acting Injectible), indicated for relief of skeletal muscle spasm without sedation; and the expectorant-antihistaminic-decongestant formulations Dimetane Expectorant and Dimetane Expectorant-DC.

ROCHE LABORATORIES — Ballroom
Nutley, New Jersey — Booth 16

J. B. ROERIG & COMPANY — Ballroom
New York, New York — Booth 15

J. B. Roerig and Company will welcome members of the medical profession at the company's exhibit of leading specialties and new products. Representatives will be in attendance to answer any questions you may have. Roerig recently introduced a number of new products which representatives at the exhibit will describe and give information on the results of clinical reports.

ROSS LABORATORIES — Ballroom Foyer
Columbus, Ohio — Booth 2

Ross Laboratories, who also manufacture Similac, features SIMILAC WITH IRON, a new prepared infant formula supplying 12 mg. of ferrous iron per quart of formula. SIMILAC WITH IRON is designed for use when iron is indicated in infancy, for maintenance of iron stores, to provide prophylaxis against iron-deficiency anemia and to support the normal diet. Some special indications for use are following placental or traumatic blood loss, for prematures and twins, for the pallid, irritable, anorectic infant with an unsatisfactory blood picture and following prolonged infection or diarrhea.

SANBORN COMPANY — Ballroom
Waltham, Massachusetts — Booth 15

New ELECTROCARDIOGRAPHS of advanced design and function, as well as latest models of other instruments for diagnostic use, will be displayed and demonstrated at the Sanborn Company booth 15.

Demonstrations and/or data will also be available on Sanborn instruments for biophysical research—single and multi-channel recording systems, monitoring oscilloscopes and physiological transducers.

Qualified Sanborn representatives will be pleased to answer questions and assist you with technical problems.

SANDOZ PHARMACEUTICALS — Ballroom
Hanover, New Jersey — Booth 25

Sandoz Pharmaceuticals cordially invites you to visit our display at booth 25.

MELLARIL—the first potent tranquilizer with a selective action (i.e.—no action on vomiting centers). This unique action gives specific psychic relaxation with safety at all dosage levels.

FIORINAL—a new approach to therapy of tension headache and other head pain due to sinusitis and myalgia.

BELLERGAL Space Tabs assure around the clock control of functional complaints (example—menopause symptoms) in the periphery where they originate.

W. B. SAUNDERS COMPANY — Ballroom
Philadelphia, Pennsylvania — Booth 12

Among the full line of Saunders titles on display are these newer ones of special note: Current Therapy 1960; Cecil-Loeb: Medicine; Davis-Christopher: Surgery; Nelson: Pediatrics; DePalma: Fractures; Williamson: Office Diagnosis; Moore: Metabolic Care of the Surgical Patient; Ochsner & DeBakey: Christopher's Minor Surgery; and Bakwin & Bakwin: Behavior Disorders in Children.

SCHERING CORPORATION — Sunset Room
Bloomfield, New Jersey — Booth 59

Schering Corporation welcomes the members of the California Medical Association. Our representatives cordially invite you to visit the Schering technical exhibit where they will be glad to discuss with you the recent therapeutic advances in Schering research.

The products featured will include Fulvicin, the first oral antifungal antibiotic for ringworm; Deronil, the corticosteroid of choice; Polaramine, the lowest dosage antihistamine and Trilafon, the tranquilizer and antiemetic of unexcelled efficacy.

JULIUS SCHMID, INC. — Sunset Room
New York, New York — Booth 63

An interesting and informative exhibit featuring IMMOLIN Vaginal Cream-Jel for use without a diaphragm; RAMSES Flexible Cushioned Diaphragms; RAMSES Vaginal Jelly; VAGISEC Jelly and Liquid for vaginal trichomoniasis therapy; and XXXX (FOUREX) Skin Condoms, RAMSES, SHEIK and ESQUIRE Rubber Condoms for the control of trichomonal reinfection.

G. D. SEARLE & CO. — Ballroom
Chicago, Illinois — Booth 30

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research.

Featured will be Dartal, the new tranquilizing agent which controls activities associated with anxiety states and other neuroses; Enovid, the new synthetic steroid for treatment of various menstrual disorders; Zanchol, a new biliary abstergent; Nilevar, the new anabolic agent, and Rolicton, a new safe, non-mercurial oral diuretic.

Also featured will be Vallestril, the new synthetic estrogen with extremely low incidence of side reactions; Pro-Banthine and Pro-Banthine with Dartal, the standards in anti-cholinergic therapy; and Dramamine and Dramamine-D, for the prevention and treatment of motion sickness and other nauseas.

SHERMAN LABORATORIES — Boulevard Room
Detroit, Michigan — Booth 78

ELIXOPHYLLIN—Severe asthmatic attacks are not merely relieved, but terminated in 10 to 20 minutes by Elixophyllin, given orally. In milder attacks, its speed has been described as "instantaneous."

Wheezing, retrosternal congestion and coughing caused by bronchospasm are usually relieved in 15 minutes following a dose of 45 cc. of Elixophyllin.

Vital capacity increases were noted as soon as 5 minutes after administration. Pick up these data and reports on their clinical significance at the Sherman booth.

SMITH KLINE & FRENCH LABORATORIES — Ballroom
Philadelphia, Pennsylvania — Booth 10

E. R. SQUIBB & SONS — Boulevard Room
New York, New York — Booth 86

J. W. STACEY COMPANY — Ballroom Foyer
San Francisco — Booth 7

THE STUART COMPANY — Ballroom
Pasadena — Booth 20

The Stuart representatives extend a cordial invitation to physicians attending this meeting to discuss with them the latest pharmaceutical developments of The Stuart Company. Especially featured will be EFFERGEL, EFFERSYL and EFFERSYLLIUM, the first effervescent bulk laxatives.

SWIFT & COMPANY — Boulevard Room
Chicago, Illinois — Booth 88

Swift's Baby Foods, the most complete variety of meat and egg yolk products—plus High Meat Dinners—for your infant patients, are featured at the Swift exhibit. Reprints of our studies on the role of meat in the infant's diet including the results of research on meat and its effect on infant iron metabolism are available. Also obtainable is our Mother Booklet, "A Better Start in Life."

TESTAGAR & CO., INC. — Boulevard Room
Detroit, Michigan — Booth 79

Fellows Division of Testagar introduces a new smaller size Felsule Chloral Hydrate—smaller than ever before possible and a new patented process eliminates the leakers found in all past types of Chloral Hydrate capsules.

The Testagar Division presents a superior method of control with timed medication called Q-CAPS. It is unique and a superior product to anything in its field.

Many interesting and useful items are of interest to the profession. We will present a few of our 400 items that have proven to be outstanding in acceptance.

THERMO-FAX SALES, INC. — Sunset Room
Los Angeles — Booth 57

The "Thermo-Fax" Copying Machine exhibit will feature the revolutionary "Instant Electric Statements" system for accounts receivable developed by the Products Application group of Minnesota Mining & Manufacturing Company. Many other applications of interest to those in the medical profession, will be demonstrated.

TRU-EZE MFG. CO., INC. — Sunset Room
Burbank — Booth 34

See our demonstration on the Tractomatic portable intermittent traction machine. Adaptable to vertical cervical traction or horizontal cervical and lumbar traction. Simplicity of operation permits you to see other patients while treatment is in effect.

As an added feature we will be showing the New "Tru-Tract" RT-99 Traction and Therapy Table. Ideal for horizontal traction. Split in two sections: lumbar section operates on ball-bearing rollers, cervical traction at any angle up to 45 degrees.

For the profession preferring vertical cervical traction or with limited office space use the "TRU-TRAC" Flexion Traction Chair. Traction at any angle up to 45 degrees. Provides definite *Flexion* while supporting the low-back.

Also see our many improvements on economical traction sets for home use, supplementing office treatment and aiding in earlier hospital release.

U. S. VITAMIN CORPORATION — Boulevard Room
New York, New York — Booth 109

NOW AVAILABLE and on display—DBI—the new "full-range" oral hypoglycemic agent. DBI, brand of phenformin (N^1-B-phenethylbiguanide HCl) is distinctly different in chemical structure and physiologic action from the oral hypoglycemic sulfonylureas. It effectively lowers blood sugar and eliminates glycosuria in mild, moderate and severe diabetes. DBI, in combination with insulin, improves regulation of "brittle" adult and juvenile diabetes. In juvenile diabetes, DBI often permits up to 50% reduction in insulin requirement. It is also effective in the insulin-resistant, and in primary and secondary tolbutamide and chlorpropamide failures. Full details available on dosage, indications, possible side effects, safety, precautions and contraindications.

THE UPJOHN COMPANY — Ballroom
Kalamazoo, Michigan — Booth 23

WALKER LABORATORIES, INC. — Sunset Room
Mount Vernon, New York — Booth 45

PEPTOLIN, a tonic for relief of chronic fatigue, will be featured. PEPTOLIN is a palatable, deep brown elixir, with a sparkling sherry wine base—providing a mood elevator and energizer with vitamins, iron, minerals and bioflavonoids.

Other features will include: VAD, VIACETS, BACIMYCIN PRODUCTS, QUINAMM, NICOTINIC ACID 500 MG., HEDULIN.

WAMPOLE LABORATORIES — Boulevard Room
Stamford, Connecticut — Booth 82

Wampole Laboratories representatives will be available to discuss Organidin, the organically-bound iodine, unsurpassed for stability, full effectiveness, smooth even absorption, and patient toleration—Verapene, the hypotensive providing Reserpine, a tranquilizing alkaloid of Rauwolfia serpentina together with the hypotensive alkaloids of Veratrum, Protoveratrines A and B for use in controlling the symptoms of moderate and severe essential hypertension.

Wampole representatives will also discuss and demonstrate the Denco-Reagents for the detection of acetone and sugar in urine specimens. These are simple accurate urine tests which require no laboratory equipment for qualitative determinations.

WARNER-CHILCOTT LABORATORIES — Sunset Room
Morris Plains, New Jersey — Booth 51

Nardil—Safe, new, rapidly effective treatment for true (endogenous) depression, restores depressed and despondent patients to reality with no toxic effect on blood, liver or kidneys. *Gelusil*—the physician's antacid—for the relief of gastric hyperacidity and management of peptic ulcer. Clinically superior because it is nonconstipating. Ideally suited for the peptic ulcer patient because it contains no laxative which might cause irritation and hypermotility. *Peritrate*—Painful seizures often create fear in the patient with angina pectoris. Attacks can be controlled and fear arrested by prophylactic management with Peri-

trate, the long-acting coronary vasodilator. Prescribed on a regular daily dosage schedule, Peritrate increases coronary circulation and lessens the frequency and severity of attacks. In addition, nitroglycerin dependence is often dramatically reduced and exercise tolerance increased.

THE WARREN-TEED PRODUCTS COMPANY — Sunset Room
Columbus, Ohio — Booth 71

The Warren-Teed Products Company is featuring three pharmaceutical specialties at their booth 71.

ILOPAN—injectable d-pantothenyl alcohol for treatment of atonic intestinal distention.

ILOPAN-CHOLINE TABLETS—oral therapy for gastrointestinal gas retention in ambulatory patients.

MODANE—a nutritional deconstipant.

Warren-Teed representatives cordially welcome all registrants to visit their booth.

WESTERN SURGICAL SUPPLY COMPANY — Ballroom Foyer
Los Angeles — Booth 3

WESTWOOD PHARMACAL CORP. — Sunset Room
Buffalo, New York — Booth 37

WHITE LABORATORIES, INC. — Boulevard Room
Kenilworth, New Jersey — Booth 81

WINTHROP LABORATORIES — Sunset Room
New York, New York — Booth 52

Winthrop Laboratories cordially invites you to visit our booth 52, where the following product will be featured:

Trancopal, the first true "tranquilaxant"—potent muscle relaxant and effective tranquilizer. Trancopal is used for low back pain and other musculoskeletal disorders, anxiety and tension states, dysmenorrhea, premenstrual tension, etc. It combines an unusually high rate of clinical effectiveness with low toxicity; side effects are less than 3%. Available in two strengths: 100 mg. Caplets (peach) and 200 mg. Caplets (green). Average adult dose, 100 or 200 mg. three or four times daily.

WOODSIDE ACRES, INC. — Boulevard Room
Redwood City — Booth 76

Woodside Acres Hospital, exclusively for the treatment of alcoholism. Conditioned Response Therapy method based on the theory that alcoholism is predominantly a physiological demand for alcohol.

CANCER COMMISSION
CALIFORNIA MEDICAL ASSOCIATION

PRE-CONVENTION CONFERENCES

LOS ANGELES • SATURDAY, FEBRUARY 20

Radiology

West Venetian Room, Ambassador Hotel

Chairman Merrell A. Sisson, M.D., San Francisco

Secretary D. J. Sayles, M.D., San Diego

DIAGNOSTIC SESSION—9:30 a.m. to noon

Twelve diagnostic cases with histories and films will be presented. Cases have been selected to illustrate specific problems in the radiological and clinical diagnosis of cancer. Audience participation and discussion are urgently requested.

THERAPY SESSION—2:00 p.m. to 4:30 p.m.

Five cases with specific therapy problems will be presented. The audience is asked to participate actively.

Pathology

9:15 a.m. to noon • 2:00 p.m. to 4:30 p.m.

East Venetian Room, Ambassador Hotel

Moderator: GEORGE J. HUMMER, M.D., Santa Monica

The Pre-Convention Conference on the Lymphomas will be conducted under the chairmanship of Frank R. Dutra, M.D., Castro Valley.

Members who wish to attend this conference are requested to register now with Weldon K. Bullock, M.D., Registrar, Tumor Tissue Registry, C.M.A. Cancer Commission, Los Angeles County Hospital, 1200 North State Street, Los Angeles 33.

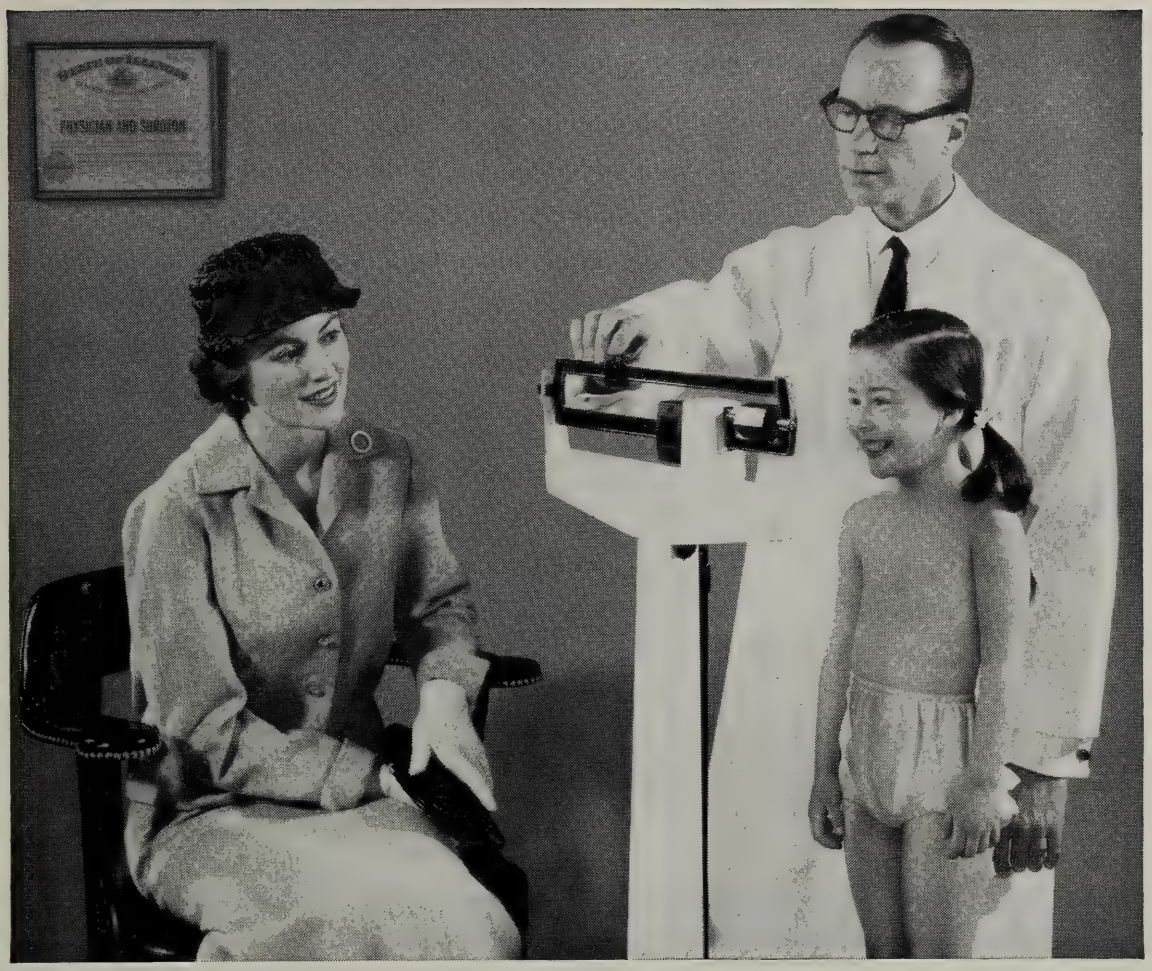
7:00 p.m.

Dinner meeting of the California Society of Pathologists. For reservations contact Ernest Simard, M.D., Secretary, 708 Cass Street, Monterey.

Cancer Commission Dinner

6:30 p.m.—Frenchette Room

Annual Dinner Meeting of the Cancer Commission and Advisory Committee.



Underweight Children Gain and Retain Weight with Nilevar®

One of the most convincing evidences of the anabolic activity of Nilevar, brand of norethandrolone, has been its ability to improve appetite and increase weight in poorly nourished, underweight children.

A highly important feature of the weight gain thus produced is that it is not ordinarily manifested by deposition of fat but as muscle tissue resulting from the protein anabolism induced by Nilevar.

Anorexia and "Weight Lag" Study—Brown, Libo and Nussbaum have reported* consistent and definite increases in rate of weight gain in eighty-six patients, ranging in age from 7 weeks to 15½ years. This beneficial action of Nilevar was observed in the patients with organic and traumatic disorders as well as those whose only complaints were poor appetite and/or persistent failure to gain weight.

In this study, the weight gained was not lost after discontinuance of Nilevar therapy although many patients did not continue the sharp gains effected by the drug.

The authors are of the opinion that Nilevar is a highly useful anabolic agent for influencing weight gain in underweight children.

When Nilevar is administered to children a dose of 0.25 mg. per pound of body weight is recommended and continuous dosage for more than three months is not recommended.

Nilevar is supplied as tablets of 10 mg., drops of 0.25 mg. per drop and ampuls of 25 mg. in 1 cc. of sesame oil. Further dosage information in Searle Reference Manual No. 4.

G. D. Searle & Co., Chicago 80, Illinois.
Research in the Service of Medicine.

*Brown, S. S.; Libo, H. W., and Nussbaum, A. H.: Norethandrolone in the Successful Management of Anorexia and "Weight Lag" in Children, Scientific Exhibit presented at the Annual Meeting of the American Academy of Pediatrics, Chicago, Oct. 20-23, 1958.

Tranquilizers Have "Little to Offer" in Skin Conditions

Tranquilizing drugs have "little to offer" in the treatment of patients with dermatological conditions, a Hayward, California, physician found after an extensive study which required four years to complete.

Dr. Wayne Wright, who reported his findings in the *Journal of the American Medical Association,* used nearly every type of tranquilizing drug in a study which involved a total of 740 patients, who were suffering from a wide variety of skin conditions. Many of the clinical cases were from the Travis Air Force Hospital in Fairfield, California.

Dr. Wright, who was assisted in his study by Drs. Jean S. Wright and Max Krause, concluded that there was only one type of dermatological condition which was helped by a tranquilizing drug. Nummular eczema, characterized by coin-shaped patches on the skin, was "definitely benefited" by one of the drugs, hydroxyzine hydrochloride.

Enough patients were helped, Dr. Wright said, to "conclude that it merits a trial in treatment of patients with this condition."

As adjunctive therapy, the tranquilizers help to relieve itching, to produce sleep, and to allow dosage of steroids and certain hormones to be reduced, the *Journal* article said.

The study revealed that the patients suffered many side reactions from this class of drugs whose principal effect is to calm down nervous, anxious, excited and agitated people. Minor side effects of the drugs used were blurred vision, nasal congestion, dryness of the mouth, changes in the pulse rate and constipation. The most serious side reactions were convulsions.

6,860 Students Receive M.D. Degrees in 1958-59

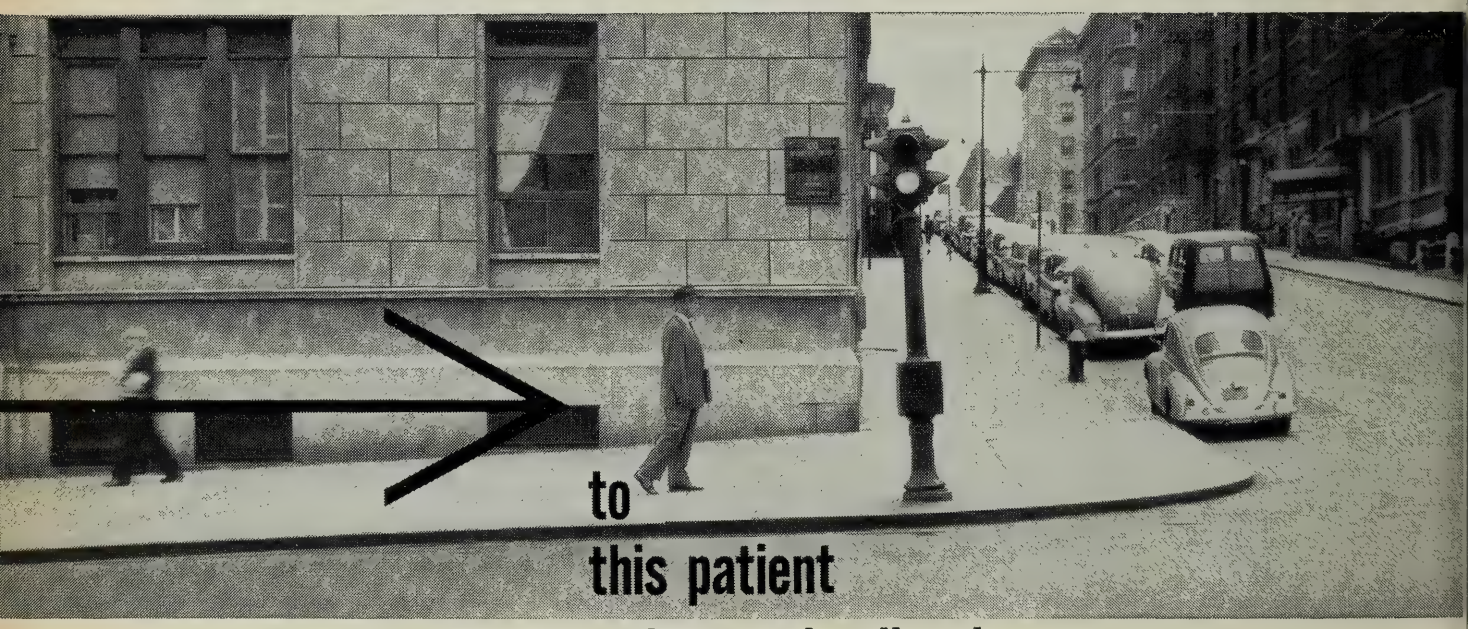
(Continued from Front Advertising Section, Page 49)

sents a challenge at least as important as any problem facing medicine today," the A.M.A. report said.

The council indicated a need for 10,000 graduates a year from medical schools in the United States by 1975.

"The fundamental issue," the report said, "does not involve the question of which of various studies have resulted in the most accurate estimate of the need for increased numbers of medical school graduates. The basic and urgent concern is that all estimates indicate a need for expansion of educational facilities in medicine in a brief period which far exceeds any expansion of such facilities that has occurred in a similar period during modern times."

The council offered several methods which could be used to meet the need for expanded educational



with intermittent claudication
every block was a mile long
now...arlidin
makes the blocks so much shorter...
he can walk many more of them in comfort

u. s. vitamin & pharmaceutical corporation
Arlington-Funk Laboratories, division
250 East 43rd Street, New York 17, N. Y.

facilities in medicine, including increased capacity of existing medical schools, but then added:

"Care must be exercised that medical schools not be induced to expand beyond their capacity to maintain the proportionately increased teaching staff necessary to preserve high standards of education and research."

The council estimated that even though existing schools are expanded, "it appears likely that at least 10 new schools with an average graduating class of 100 students will be required" to meet the health care needs of an exploding population.

On the subject of medical students of the future, the council said that " medicine is finding increased competition for the pool of top-ranking students because it no longer occupies the unique position as a profession which it held in the past and shared largely only with law and the ministry. The professions open to the college graduate are now much broader, and they provide the prestige, intellectual satisfaction, and financial rewards comparable to those offered by medicine."

The council cautioned that "medicine must make active efforts to inform young people of the breadth of interests and challenges it offers or surely it will suffer a serious loss of the best young talent."

Other salient points in the council's report are:

—During 1958-59, 56 institutions in the U. S. and five in Canada initiated, completed or have funds committed for construction and equipment of new facilities.

—Major projects planned for initiation in 1959-60, with funds already committed, are estimated at approximately 49 million dollars for construction and five million dollars for equipment. Such construction is being planned by 31 schools.

—The total enrollment in first year medical school classes for the 1958-59 academic year was 8,128, the largest to date in the United States. Entering class sizes increased in 35 schools, were unchanged in 24 and decreased in 26.

—In 1958-59, a total of 59,102 applications were filed by 15,170 persons or an average of 3.9 applications made by each prospective medical student.

—Of all first-year medical students, more than one-third, 37 per cent, came from five states—New York, Pennsylvania, California, Ohio, and Illinois.

—There were fewer than 20 first-year medical students from each of seven states—Alaska, Delaware, Maine, Nevada, New Mexico, Vermont, and Wyoming, and fewer than 30 from two other states—New Hampshire and Rhode Island. Of these nine states, only New Hampshire and Vermont have medical schools.

—At least two-thirds of the entering classes comprise "B" average students. About one-sixth had college grade averages of "A" and about one-sixth to one-seventh had "C" averages.



arlidin®

brand of nylidrin hydrochloride N.N.D.

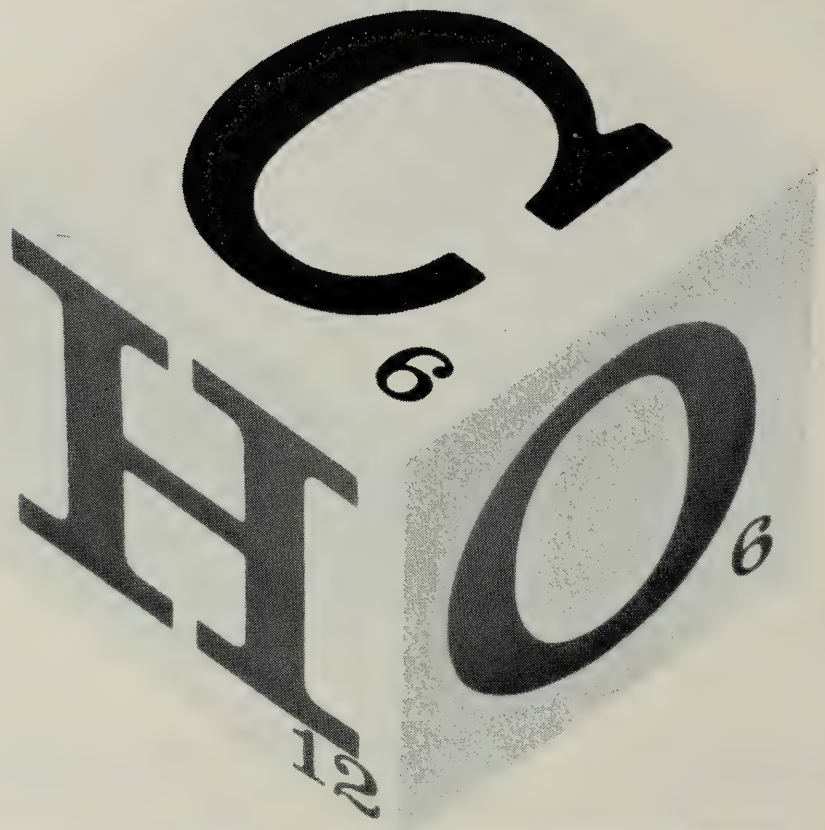
safely increases local blood supply and oxygen where needed most... in distressed "walking" muscles for sustained, gratifying relief of pain and spasm in

intermittent claudication of
arteriosclerosis obliterans
thromboangiitis obliterans
diabetic atheromatosis

night leg cramps
ischemic ulcers
Raynaud's syndrome
cold feet, legs and hands

Arlidin is available in 6 mg. scored tablets, and 5 mg. per cc. parenteral solution. See PDR for dosage and packaging.

Protected by U. S. Patent Numbers:



AN AMES CLINIQUICK®

CLINICAL BRIEFS FOR MODERN PRACTICE

WHY IS DIABETES IN INFANTS SO DIFFICULT TO DIAGNOSE?

Because of the infrequency of the disease in this age group, its sudden onset, the profusion of inconsistent presenting symptoms, and because the accompanying symptoms of anorexia and vomiting are also characteristic symptoms of many other ills of infancy.

*Source: Traisman, H. S.; Boehm, J. J., and Newcomb, A. L.: Diabetes *8*:289, 1959.

for those pediatric puzzlers..."A routine urinalysis and blood sugar should be done whenever the possibility of diagnosing diabetes is entertained."*

DIABETES MELLITUS AT AGES 1 TO 5

Order of Frequency of Presenting Symptoms in 110 Patients

Symptoms	No. of Patients	Per cent of total group
Polyuria	93	84.5
Polydipsia	89	81.0
Weight loss	47	42.7
Polyphagia	28	25.4
Anorexia	16	14.5
Lethargy	14	12.7
Enuresis	7	6.4
Vomiting	5	4.5
Irritability	3	2.7
"Craving for sweets"	3	2.7
"Sticky diaper"	3	2.7
"Strong odor to urine"	2	1.8
Glycosuria	2	1.8
Hypoglycemia	2	1.8
Personality change	1	0.9
Boils	1	0.9
Headache	1	0.9
Abdominal cramps	1	0.9

Adapted from Traisman, H. S.; Boehm, J. J., and Newcomb, A. L.*

the standardized urine-sugar test for reliable quantitative estimations

AMES COMPANY, INC Elkhart • Indiana Toronto • Canada

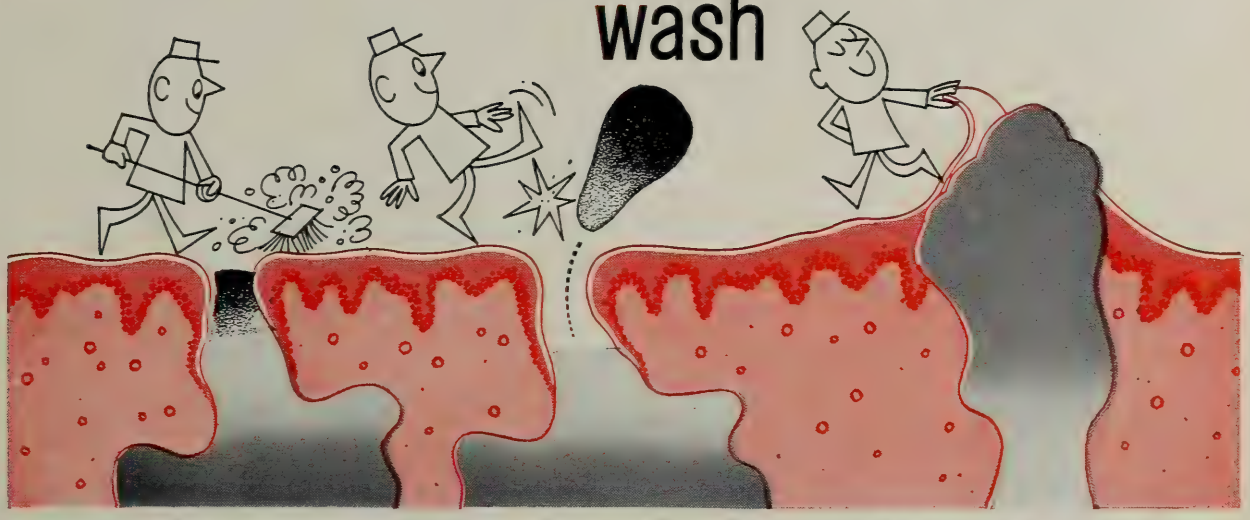
COLOR-CALIBRATED CLINITEST®

BRAND Reagent Tablets

84060

- full-color calibration, clear-cut color changes
- established "plus" system covers entire critical range
- standard blue-to-orange spectrum
- standardized, laboratory-controlled color scale
- "urine-sugar profile" graph for closer control

Fostex®
treats their acne while they wash



degreases the skin helps remove blackheads dries and peels the skin

...and this is how it works

Fostex provides essential actions necessary in treating acne. It washes off excess oil. It unblocks pores by penetrating and softening blackheads. It dries and peels the skin, removing papule coverings, thus permitting drainage of sebaceous glands.

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"Cluster Headache" Called Type of Migraine

Repeated daily attacks of migraine headache are actually a specific type of migraine—"cluster headache." Also called "Harris's migraine" after the man who first systematically described the condition, "cluster headache" occurs after weeks of freedom from pain. A bout usually lasts for weeks, with the patient having at least one attack daily.

Other characteristics of the condition, as described in an editorial in the October 31 issue of the *Journal of the American Medical Association*, are:

—The patient is more often a man than a woman (between two and four to one) and between the ages of 30 and 50 years, although first attacks have been reported in patients as young as 11 and as old as 59.

—The attacks of pain are intolerable, but their duration is relatively short—minutes to an hour. The constant boring or throbbing pain is at the outer side of the eye. It may spread to the remainder of the cheek, the forehead, the scalp and occasionally, the neck.

—The pain usually affects the same side repeatedly, in fact, the same spot. Most attacks occur on the right side.

—In contrast to the more usual migraine where the patient prefers to lie down and pull the covers over his head, with cluster headaches, he cannot recline and usually must pace. There seems to be a relationship between the pain and the muscular activity that it causes.

—The attacks tend to occur at the same time of day or night, most frequently between 2 and 3 a.m.

—The bouts recur irregularly and then may cease after occuring for years.

—Most patients have previously had the more classic form of migraine, which is replaced by the Harris form.

Preventive treatment consists of regular injections of ergotamine tartrate, a drug commonly used in oral form for the treatment of regular migraine. The patient is taught to give himself the injections daily for five days in each week. The two free days allow the patient to determine whether the bout of pain has ceased.

Another interesting fact about this "variant of the galaxy that is migraine" is that the patient cannot tolerate alcoholic drinks during a bout, presumably because of the alcohol's dilating effect on the blood vessels of the head.

Oral Polio Vaccine Safety Questioned

The risks of oral polio vaccine "appear to be greater than had been suspected" and much more knowledge must be obtained before it can be considered safe.

Vaccines made from live polio viruses reduced in strength are now being given by mouth to thousands of children all over the world, under the direction of Dr. Albert Sabin, University of Cincinnati, developer of the vaccine.

The researchers, Joseph L. Melnick, Ph.D., Matilda Benyesh-Melnick, M.D., and James C. Brennan, M.D., said, "If caution was called for in 1954 and 1955 when the Salk vaccine was introduced into large-scale field use, then caution should also be the watchword now."

The safety of the vaccine has not been definitely proved. Safety tests performed in a number of different laboratories are in "serious disagreement" about the degree of attenuation (reduction in strength) of the viruses.

"We do not imply that we have proved that such virus strains are dangerous either for the vaccinated child or for the community, but we wish to emphasize that the risks appear to be greater than had been suspected and that much more knowledge must be obtained . . . before the available attenuated strains can be said to meet the criteria of a safe and effective vaccine. . . ."

A study among Mexican children showed many who were free of polio antibody, but who failed to develop antibodies when given the vaccine. This apparently occurred because they were already infected with a nonpolio enterovirus and this infection blocked the implantation of the polio virus. Such interference might well limit the effectiveness of an orally given vaccine in areas where enterovirus infections are common.

In addition, the Mexico City study showed that the number of children with polio antibodies prior to receiving vaccine was already 33 per cent among one-year-old children; 54 per cent in two-year-olds, and 85 per cent in three-to-five-year-olds.

Giving vaccine to children whose contacts are chiefly immune by natural infections tells very little about the safety of a vaccine for a community, since the opportunities of spread in an immune population are severely limited. Thus the vaccine must be tried in groups with low rates of immunity. Then it can be determined if a spread of the virus from vaccinated to non-vaccinated individuals is dangerous, the authors said.

The question of safety resolves itself on the frequency of disease in vaccinated children and their contacts, as compared with that anticipated from natural infection, they concluded.

The authors are with the department of virology and epidemiology and the department of pathology at Baylor University College of Medicine.

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PATHIBAMATE-200—1 or 2 tablets three times a day at mealtime and 2 tablets at bedtime.

Adjust to patient response.

Contraindications: glaucoma; pyloric obstruction, and obstruction of the urinary bladder neck.

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The Surgical Conscience*

Conscience in surgery means a strong sense of right and wrong, a willingness to help others, a feeling of compassion for the unfortunate, self-discipline, and a strong faith in the sanctity of God and man. It can be conditioned by education and experience. It depends not only on the surgeon's individual moral fiber and religious concepts, but also on his heritage of philosophical doctrines, his scientific and factual knowledge, and his judgment. It determines his conduct in many situations, such as the current difficulty with hospital-acquired infections, where temporary individual gains from the misuse of antibiotics may result in protracted trouble to a community. It compels the surgeon at times to resist popular demands and to have the moral courage to protest. It requires him to rise above the selfishness of small professional groups and to devote himself to the individual patient with gentleness, compassion, firmness, and resolution. Many of the current problems concerning the care of the sick are complicated, not solved, by rigid regulations and dictatorial authority. Their solution depends, rather, on a rebirth of the surgical conscience.

*Abstract from A.M.A. Arch. Surg., 79:167-175, Aug. 1959, W. A. Altemeier.

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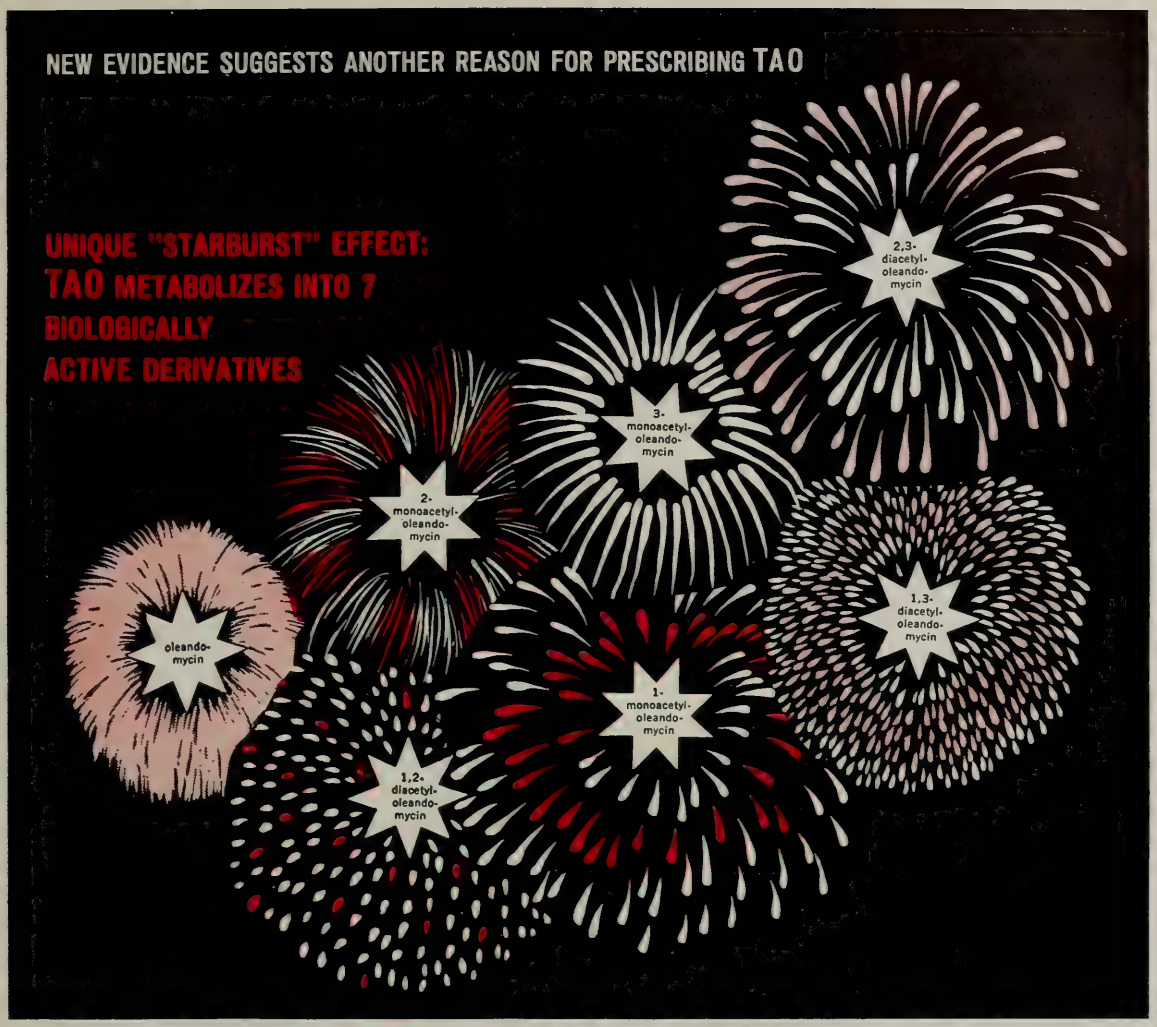
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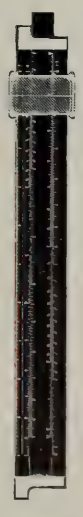
1. English, A. R., and McBride, T. J.: Proc. Soc. Exper. Biol. & Med. **100**:880 (Apr.) 1959. 2. Celmer, W. D.: Antibiotics Annual 1958-1959, New York, Medical Encyclopedia, Inc., 1959, p. 277. 3. English, A. R., and Fink, F. C.: Antibiotics & Chemother. **8**:420 (Aug.) 1958.

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Progress of Medical Science Forces High Laboratory Cost

How the progress of medical science forces the cost of certain laboratory procedures to reach almost unrealistic levels over which neither patient nor physician has control is seen from an article appearing in the *Journal of the American Medical Association.*

Heart catheterization, a valuable diagnostic tool to the physician, has grown exceedingly complex and costly, especially in relation to the equipment and personnel required. This cost, however, is only the beginning. Heart catheterization is one of many procedures terminating in cardiac surgery which is carried out by a large team using a costly heart pump.

Cost analysis of heart catheterization is covered in a *Journal* article written by Dr. Max H. Weil, formerly chief of cardiology at the City of Hope Medical Center, Duarte, California, and presently assistant professor of medicine at the University of Southern California School of Medicine, Los Angeles.

Heart catheterization, first described by Dr. Werner Forssmann of West Germany in 1929, is used as a diagnostic procedure in certain types of heart conditions, especialy in children born with heart defects. In 1956, Dr. Forssmann, along with Drs. Andre F. Cournand and Dickinson W. Richards of Columbia University, were jointly awarded the Nobel prize in medicine for perfecting a method of charting the human heart by catheterization.

The technique, for example, can yield valuable data on the pressure and oxygen content of the blood and the way in which the blood flows through the pulmonary artery system, and the contributing systemic circuit. Since definitive treatment of congenital heart lesions is surgical, the information obtained by cardiac catheterization is sometimes needed in order to reduce the number of patients

(Continued on Page 94)

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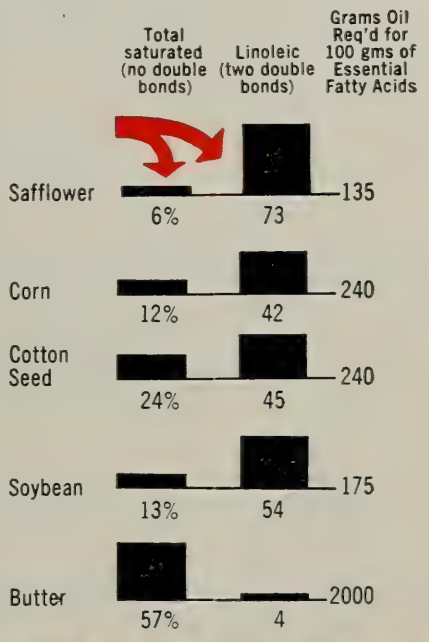
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(Continued from Page 80)

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COVINA—MEDICAL BUILDING suitable three to five doctors. Opposite 250-bed Inter-Community Hospital. Available December 1959. Contact Glenn Reed, 226 West College, Covina, California. Telephone ED 9-1294.

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Accidental Poisoning Cases Are on the Increase

An official of the New York City Department of Health termed as "alarming" the increasing number of fatalities from accidental poisonings.

Dr. Harold Jacobziner, assistant commissioner of the department, called for a broad educational campaign to alert the nation to the dangers of poisoning from drugs and household products.

Writing in the *Journal of the American Medical Association,* Dr. Jacobziner said, "Fourteen hundred fifty deaths were reported in the United States last year from poisonings by agents other than poison gases and spoiled food. Over 400 of these deaths were in children under five years of age.

"More children under five . . . died last year in New York City from accidental chemical poisonings than from diphtheria, poliomyelitis, rheumatic fever, scarlet fever, and other streptococcic infections combined.

"The alarming increase in both fatal and nonfatal poisonings is related to the rise in new products and to the increase in the population risk."

The doctor said that "internally taken drugs caused nearly 50 per cent of all poisonings, with barbiturates and aspirin as the chief offenders. Next in frequency were poisonings due to household preparations followed by those with externally applied drugs and cosmetics, pesticides, and miscellaneous products such as lead."

In offering a solution to cut down on the number of such accidents, Dr. Jacobziner said that nearly all poisonings are preventable.

"The most important item in prevention is knowledge and information about the risk involved and the population risk. Regulations and labeling alone will not prevent accidental poisonings but must be coupled with education."

He urged that such an educational program be based on facts, accurate, reliable, devoid of overdramatization, simply told, and pinpointed to the vulnerable groups and the specific hazards.

Key points in such a program, the doctor continued, should include strong emphasis on the need for keeping medications in their original containers and also for keeping all drugs and preparations out of reach of children.

He said that proper labeling of toxic substances, as recommended by the American Medical Association Committee on Toxicology, is exceedingly important. These recommendations are embodied in H. R. 7352 which was introduced in Congress by Representative Thomas B. Curtis (R-Mo.) and is pending before the House Interstate Commerce Committee.

In concluding, Dr. Jacobziner said, "Prevention is possible through education at all levels. Education requires an integrated team approach with the family physician as key member of the team. Accident prevention . . . merits the greater attention and involvement of the practicing physician."



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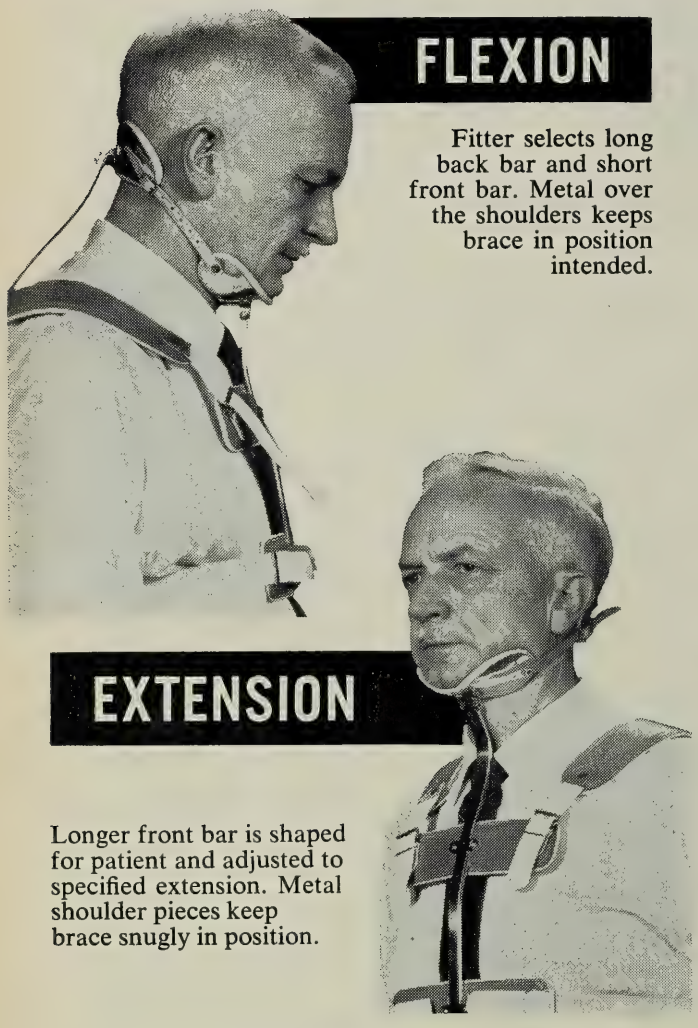
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Progress of Medical Science Forces High Laboratory Cost

(Continued from Page 74)

undergoing surgery for inoperable defects or denied operation for defects that could be corrected.

Dr. Weil stated that while the procedure is valuable in many respects, "the financial burden of development and maintenance of a proficient cardiac catheterization laboratory is such that the unit can hardly be self-sufficient."

"In addition to the need of costly physical space in a hospital area, the expense of special installation in a properly equipped laboratory may be in excess of $100,000," he said. He provided a detailed summary of actual costs involved in the establishment of one such unit. It ran to $104,113.88.

He said that with so many remarkable refinements taking place constantly in cardiac catheterization, the equipment requires almost constant replacement. It is estimated that the basic expenditure will be repeated at the end of five years.

"Further," Dr. Weil said, "successful conduct of the laboratory requires a competent medical staff on at least a half-time basis." Each procedure requires participation of a minimum of two physicians, a nurse and three additional trained persons. In small children, the services of a highly skilled anesthesiologist are required.

If three cardiac catheterizations are done weekly, the cost of technical and nursing personnel alone for each procedure is $130. This does not include the fee for the cardiologist's services or for anesthesia.

"Then expendable items such as catheters, x-ray film, radiopaque mediums and recording paper add about $65 for each procedure," he said.

Dr. Weil also pointed out that the paper work and study of data in connection with each procedure are enormous. A typical case involving the procedure—interpretation of data, calculations and compilation of the report—requires a minimum of eight hours of a heart specialist's time alone.

Dr. Weil offered a solution to the complex cost problem.

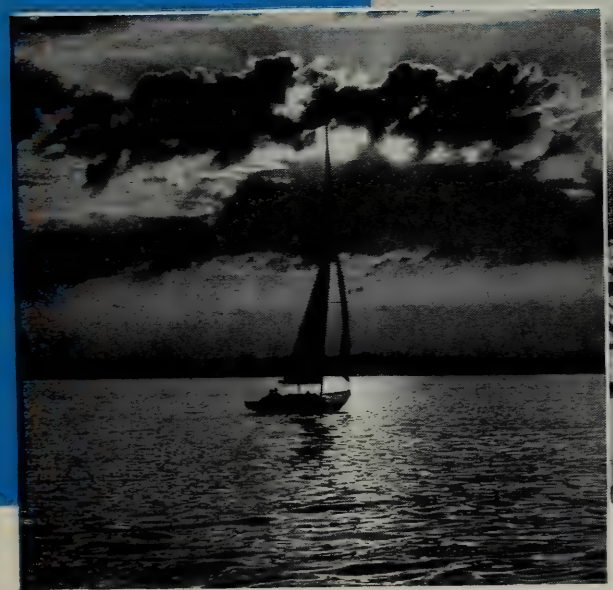
"Would it not be far better," he asked, "to pool professional and financial resources and thereby provide generous support of a centralized laboratory? Cardiac clinics throughout a geographical area, each of which has but a limited number of patients requiring detailed studies, would share the advantages provided by a laboratory which is more adequately staffed and equipped."

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Professional inquiries for California should be directed to: A. Joe Scull, M.D., Medical and Psychiatric Director, or Keith A. Seaton, Registrar, Devereux Schools, Santa Barbara, California. For Eastern and Texas Schools write: Charles J. Fowler, Registrar, Devereux Schools, Devon, Pennsylvania, or John M. Barclay, Devereux Schools, Victoria, Texas.

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Enlarged Arteries Found In Lungs of Heavy Smokers

Significant variations in the diameter of arteries of the lungs of heavy smokers as compared with those of nonsmokers have been found in a study of chest x-rays.

Dr. Josue Pagan-Carlo, department of radiology, Touro Infirmary, New Orleans, reported the findings in the *Journal of the American Medical Association.*

The arterial shadows on routine chest x-rays of 694 smokers and nonsmokers were measured by calipers in the study.

In the area of the right descending pulmonary artery, Dr. Pagan-Carlo said, the study revealed that average measurements of the arteries of heavy smokers were significantly higher than for nonsmokers.

A heavy smoker was defined as one who smokes more than 30 cigarettes a day.

The expansion of the pulmonary artery in heavy smokers may result from constriction of the smaller branches of the artery brought on by the chronic effect of nicotine, he said.

"No one knows all the possible reflexes initiated in the lungs as a result of . . . the effects of the irritating inhalants in the tobacco smoke," he said.

Dr. Pagan-Carlo pointed out that "no significant difference was demonstrable in the vascular markings of light and moderate smokers, as compared to nonsmokers."



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References: 1. Ayd, F. J., Jr.: Bull. School Med. Univ. Maryland *44*:29, 1959. 2. Azima, H., and Vispo, R. H.: A. M. A. Arch. Neurol. & Psychiat. *81*:658, 1959. 3. Lehmann, H. E.; Cahn, C. H., and de Verteuil, R. L.: Canad. Psychiat. A. J. *3*:155, 1958. 4. Mann, A. M., and MacPherson, A. S.: Canad. Psychiat. A. J. *4*:38, 1959. 5. Sloane, R. B.; Habib, A., and Batt, U. E.: Canad. M. A. J. *80*:540, 1959. 6. Straker, M.: Canad. M. A. J. *80*:546, 1959. 7. Strauss, H.: New York J. Med. *59*:2906, 1959.

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School Deans Report on Medical Advancements During 1959

Deans of American medical schools told recently how the progress of medical science brought new health and new hope to the American people during 1959.

The deans of 84 schools, polled by the American Medical Association on what they thought were the greatest medical achievements during the year, offered a plethora of divergent viewpoints, but they nearly all agreed on one point: intensive medical investigation is now going on in many quarters in the field of biochemical genetics.

Dr. William S. Stone, dean of the University of Maryland School of Medicine, said "the biggest single achievement in the field of scientific medicine in 1959 has been the increase in our knowledge of the chemistry of genetics."

This field deals with man's origins, his mode of development and reproduction of characteristics. Hence, the term genetics is applied to the study of heredity.

Man Can Plan to Improve Himself

Many biochemical geneticists, including Nobel laureates, are looking to the day when man can plan himself, and draft and carry out plans to improve the actual species as to intelligence, physique, and resistance to disease.

Dean Stafford L. Warren of the University of California Medical Center, Los Angeles, said "a better understanding of the biochemistry of inhibition of nerve impulses was achieved in 1959, and the relation of such chemistry to epileptic seizures has led to some revolutionary thinking."

He added that significant contributions also have been made to fundamental knowledge of the learning process. "It has been possible," Dr. Warren said, "to trace on a brain-wave detecting device records of the learning process. As an animal learned a particular task at our center during the past year, a tracing of new electrical activity in a particular brain area could be recorded. This could be erased with drugs that caused the animal to temporarily forget what he had learned, but the tracing returned as the drug wore off."

Such basic learning, he said, may eventually achieve a better understanding of the nation's major problem of mental health and bring about better methods of treatment.

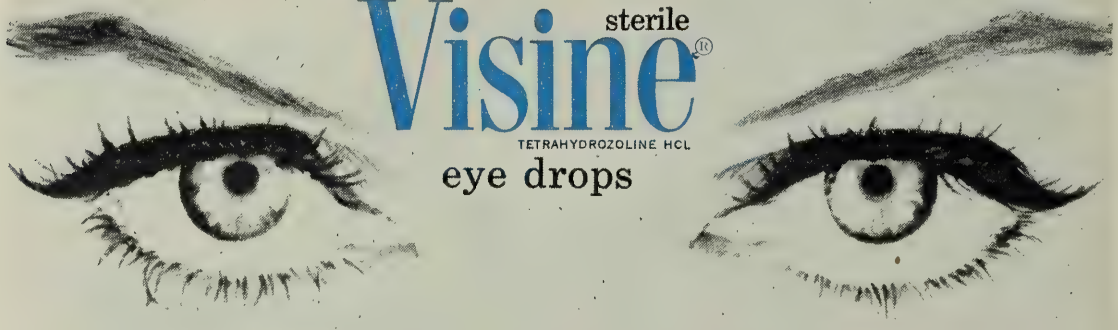
(Continued on Page 47)

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School Deans Report on Medical Advancements During 1959

(Continued from Page 44)

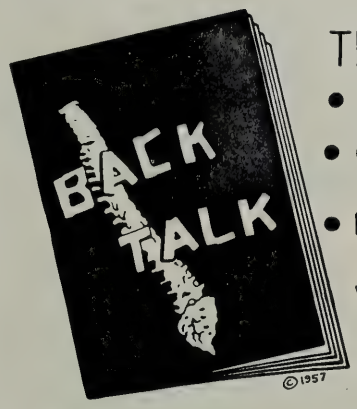
Open New Fields of Treatment

Americans who received Nobel Prizes in medicine in recent years, including the 1959 winners—Dr. Severo Ochoa of the New York College of Medicine, and Dr. Arthur Kornberg of Stanford University—have contributed immeasurably to biochemical genetics. Through their contributions they have opened up broad fields in the treatment and theory of a wide spectrum of disease. Their discoveries, capstones on previous work during more than half a century, have not only significant clinical implications, but shed new light on the nature of life and the future of man as a species.

Dr. Charles A. Doan, dean of Ohio State University Medical School, Columbus, referred to what he termed "the great" discoveries of Drs. Ochoa and Kornberg. Their discoveries related to the biological synthesis of compounds called RNA and DNA for short.

"The synthesis of RNA and DNA perhaps will have more far-reaching influence and effect on future biologic concepts and control than any other single advance this past year, or for many previous years," said Dr. Doan, adding:

(Continued on Page 54)



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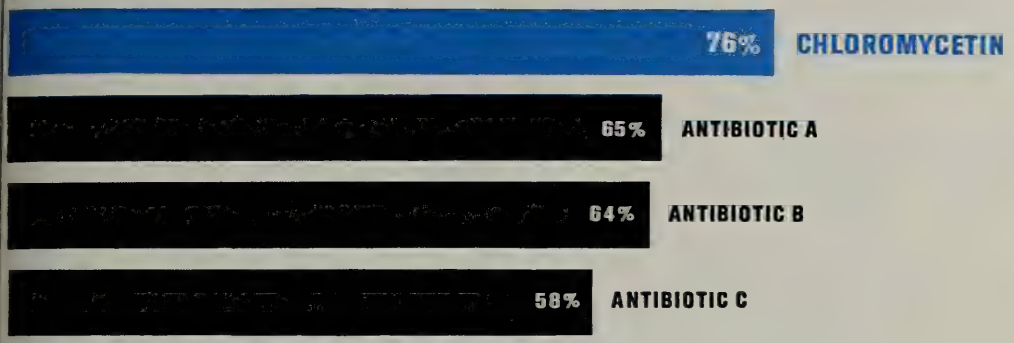
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REFERENCES: (1) Leming, B. H., Jr., & Flanigan, C., Jr., in Welch, H., & Marti-Ibãnez, F.: Antibiotics Annual 1958-1959, New York, Medical Encyclopedia, Inc., 1959, p. 414. (2) Goslings, W. R. O., & Buchli, K.: *Arch. Int. Med.* **102**:691, 1958. (3) Suter, L. S., & Ulrich, E. W.: *Antibiotics & Chemother.* **9**:38, 1959. (4) Metzger, W. I., in Welch, H., & Marti-Ibãnez, F.: Antibiotics Annual 1958-1959, New York, Medical Encyclopedia, Inc., 1959, p. 966. (5) Fischer, H. G.: *Deutsche med. Wchnschr.* **84**:257, 1959. (6) Borchardt, K. A.: *Antibiotics & Chemother.* **8**:564, 1958. (7) Schneierson, S. S.: *J. Mt. Sinai Hosp. New York* **25**:52, 1958. (8) Waisbren, B. A.: *Wisconsin M. J.* **57**:89, 1958.

*Adapted from Leming & Flanigan.[1]

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School Deans Report on Medical Advancements During 1959

(Continued from Page 47)

"The potential influence of the application of this knowledge to genetics in particular can only be imagined at this time."

Study Hereditary Information

"All life is chemistry," Dr. Ochoa said after hearing the news in October that he shared the Nobel Prize in medicine, and then added: "The more we know of these chemical reactions, the more we know of life."

DNA and RNA have been under study for years. DNA is acknowledged to be the chemical that, in most living things, passes on hereditary information from one generation to the next.

The other chemical, RNA, is a key substance in the production of protein, which is essential in the maintenance of tissue. RNA is found in some viruses —those which cause poliomyelitis and one called tobacco mosaic virus which produces a disease in plants. RNA is thought also to pass on hereditary traits.

List Specific Investigations

The deans mentioned a number of specific medical investigations now being carried out in research centers throughout the country in the field of bio-

(Continued on Page 63)

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Brain Damage Linked to Alcoholism, Malnutrition

Chronic alcoholism, or an associated nutritional defect, is related to brain deterioration, it was reported in the American Medical Association Archives of Neurology.

The report was made by three doctors of the Neurology Service, Massachusetts General Hospital, and the Department of Neurology, Harvard Medical School, who studied 50 severe alcoholics to determine the effect of alcohol on the nervous system.

The relationship of brain deterioration to chronic alcoholism has been a controversial matter for many years, according to Drs. Maurice Victor, Raymond D. Adams and Elliott L. Mancall.

They said their study had convinced them that a relationship does exist between the degeneration of that part of the brain concerned in the coordination of movements (specifically termed a restricted form of cerebellar cortical degeneration) and "the excessive imbibition of alcohol, or, perhaps more likely, to an associated nutritional defect."

The 46 men and 4 women studied were afflicted with remarkably similar symptoms, the doctors reported. In almost every instance they lacked muscular coordination of gait and of the legs.

The ailment should not be confused "with the transient variety which occurs in alcoholic patients after a severe drinking bout," they pointed out.

Of all the factors considered as possible causes of the brain damage, the doctors said, only two seemed of importance—alcohol and malnutrition.

"Although the abuse of alcohol was a feature common to all our patients, six patients had actually been abstinent for varying periods of time before the onset of their cerebellar disease," they explained.

"It is difficult under such circumstances to accept the toxic effects of alcohol as the direct causative agent. Evidence . . . and examination indicated that fully three-quarters of the patients suffered from undernutrition when they were first seen by us.

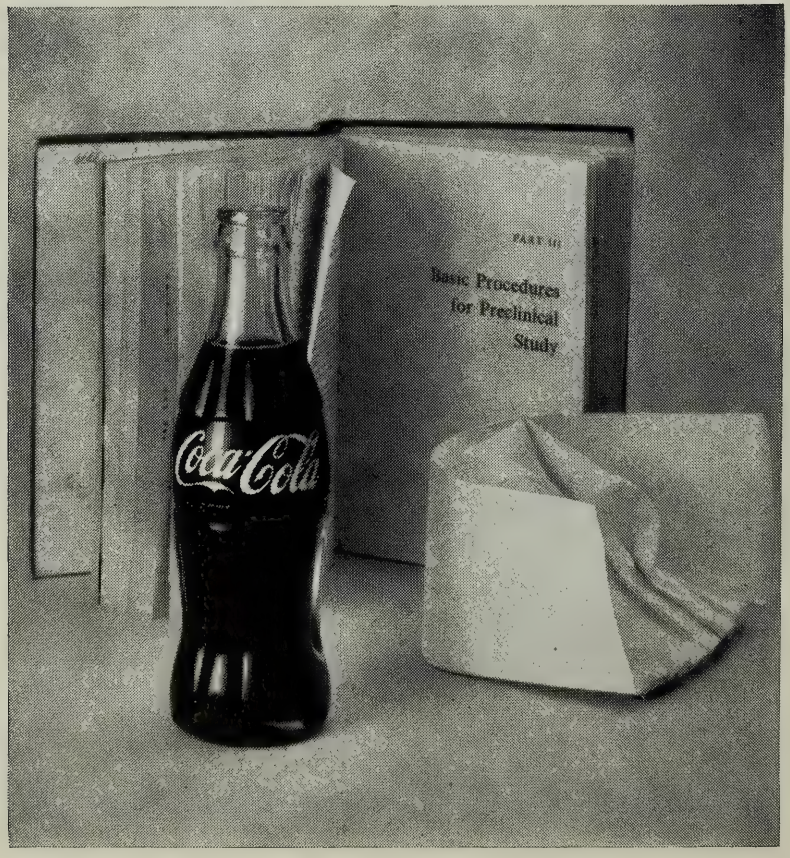
"Malnutrition may also have been a factor in the remaining patients, who came to our attention only years after the onset of their illness, after a period of abstinence and concomitant improvement in their eating habits."

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Protein	26.00 calories	6%
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School Deans Report on Medical Advancements During 1959

(Continued from Page 54)

chemical genetics. These include:

—The phenomenon, technically known as transduction, through which a virus can carry genetic material from one cell to another, a significant step in the field of transplantation of organs.

—Whether leukemia is produced by a virus and, if so, what virus is essential in initiating the disease.

—What part enzymes play in many diseases. An enzyme is a complex chemical substance found largely in the digestive juices of the body which acts as a catalytic agent on other substances and then causes them to split up. A number of diseases, including epilepsy and multiple sclerosis, are thought to be of enzymatic metabolic origin.

—Study of certain diseases in which, because of hereditary abnormality, the patient fails to manufacture an enzyme, or manufactures an abnormal enzyme that will not work.

—The possibility of moving heritable traits from one cell to another.

—The role of genetic analysis as an indispensable part in the understanding of the mechanism of cancer.

—Clinical experimentation to determine the role of genetic influences on such diseases as hypertension, coronary ailments, schizophrenia, and diabetes.

—The possibility of making synthetic substances with enzyme activity and using these artificial enzymes in the control of diseases resulting from abnormal or deficient enzymes.

—The possibility of learning more about control of cell machinery and heredity, thereby conquering many of man's ills, including hereditary defects in metabolism and the more obscure conditions.

More Known About Chromosomes

One dean, Dr. Thomas H. Hunter of the University of Virginia School of Medicine at Charlottesville, considered the "description of chromosomal abnormalities by several groups, both here and in England," as an outstanding achievement in medicine in 1959.

(Continued on next page)

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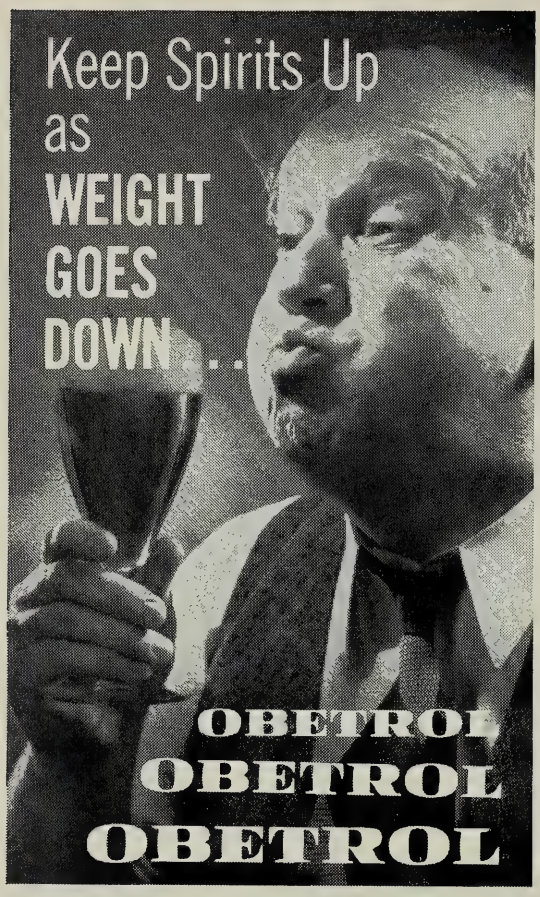
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He referred particularly to last April's announcement by British investigators that an irregular number of chromosomes inside living cells are responsible for such grave conditions as Mongoloid idiocy, abnormalities of the sexual organs, and possibly leukemia. Chromosomes are the microscopic life-threads that carry the genes of heredity—such as eye, hair, and skin color—like beads on a string. They are found inside the germ cells that unite to form new organisms, such as a human fetus.

"Methods have now been devised," said Dr. Hunter, "for the mapping of human chromosomes which promises to shed light on the basic abnormalities in many other conditions, but these findings in particular impress me as being of most fundamental importance since they clearly and unequivocally label such abnormalities as genetic in origin."

Trace Chromosomes to Disease

The chromosome "mapping" and what it has revealed so far is exciting, scientifically. It proves not only that human beings can live with chromosomal abnormalities, but more importantly because each chromosome, even a very small one, can lead to some of man's gravest maladies. This raises the question as to whether some day cell researchers will be able to pin-point the basic cause of a disposition toward cancer in the future.

Dean W. C. Davison of Duke University School of Medicine, Durham, N. C., said that in his opinion the greatest single achievement in 1959 was "development of techniques for visualization of chromosomes in man and their correlation with certain disease states."

Other deans and medical school representatives who singled out as "most significant" the advancements in the general field of genetics and their impact on the understanding of health and disease included:

Drs. Robert J. Glaser, dean, School of Medicine, University of Colorado Medical Center, Denver; Robert M. Bird, associate professor of medicine and physiology, University of Oklahoma Medical Center, Oklahoma City; James W. Colbert Jr., dean, St. Louis University School of Medicine, St. Louis; Kenneth M. Earle, dean of medicine, University of Texas Medical School, Galveston, and D. W. E. Baird, dean, University of Oregon Medical School, Portland.

Two deans, Dr. Doan of Ohio State and Dr. Ralph E. Snyder of New York Medical College, believe that the development of synthetic penicillins was a great '59 achievement.

Dr. Doan termed the synthetic penicillins, reported late in 1959, a "great advance." He added that many more synthetic therapeutic agents against cancer and leukemia would be forthcoming in "the foreseeable future."

Dr. Snyder said that the synthetic penicillins "open up a whole new area of possibilities in the attack on resistant organisms."

Reasonable Precautions Can Reduce Skiing Accidents

The danger of skiing accidents is overrated and the hazards that do exist could be reduced if skiers took reasonable precautions.

This opinion was expressed in an article in *Today's Health*, which said skiing is far less dangerous than football or boxing.

The total number of ski injuries has risen sharply but not in proportion to the rise in the number of skiers in the fast-growing sport, the article said.

The risk of injuries has been reduced by safer slopes, better instructions and improved equipment, it was pointed out.

"Most of the injuries could be avoided by reasonable prudence. In short, skiing accidents are caused by lack of physical condition, lack of training, negligence, and plain recklessness."

The National Ski Patrol blames 70 per cent of the injuries on skiers simply being "out of control."

Physicians list the following points for preventing ski injuries:

—Exercise to condition muscles before a skiing holiday.

—Warm up immediately before going out on the slope.

—Avoid major runs when tired.

—Use modern safety-release bindings.

—Take lessons if a beginner.

—Leave the trail if a stop is necessary.

—Stop a reasonable distance from the line at a tow or lift.

—Never ski alone.

—Stay out of closed areas.

—Be twice as careful when the temperature changes.

The article was written by Raymond Schuessler, Buffalo, N. Y.



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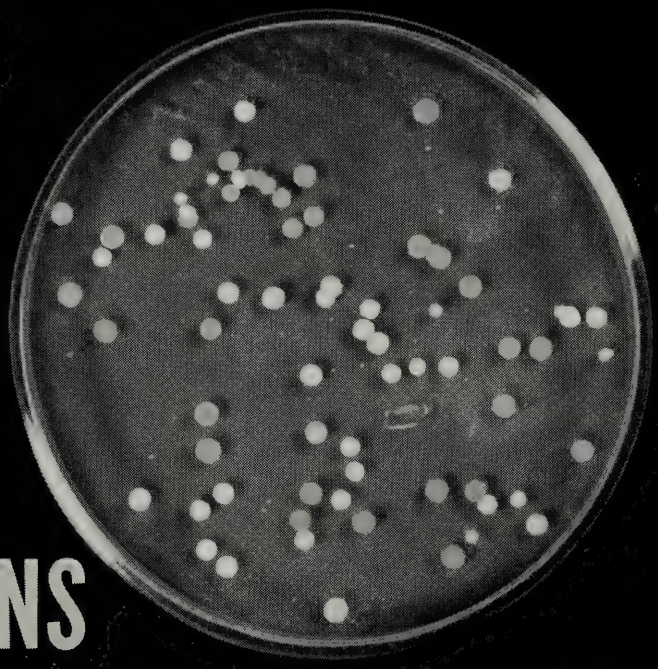
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1. Smith, I. M., and Soderstrom, W. H.: J. A. M. A., *170*:184 (May 9), 1959.

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California MEDICINE

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Volume 92 FEBRUARY 1960 Number 2

Newer Hormonal Preparations

ROBERTO F. ESCAMILLA, M.D., San Francisco

• **A review of the present status of various hormonal substances is presented. The pituitary preparations include various growth hormones (human and beef), still used only experimentally, thyrotropic hormone, used mainly for testing thyroid function, corticotropin—widely used —and gonadotropic hormone.**

Thyroid, thyroxin and triiodothyronine preparations are considered, with USP thyroid still being most useful. Glucagon may be of some use in terminating hypoglycemia — tolbutamide is now used in many older diabetic persons. New adrenal cortical steroids are still appearing and show variation in effects; cortisone or hydrocortisone remain relatively inexpensive. Many combinations are available.

The newest addition to available male hormone preparations is fluoxymesterone which is anabolic in smaller dosage than the older forms.

Several new long acting preparations of androgens, estrogens and progesterone are available, and many ingenious combinations are presented.

IN PREPARING THIS PRESENTATION, it has become worth while to give a more than cursory glance to the carefully prepared advertising literature that pours across our desks, keeping in mind that if we consider only the newer preparations currently emphasized, we may not appreciate the entire picture of what is sound in endocrine therapy. Therefore this survey will be somewhat broader than indicated in the title.

Pituitary

It is known that the pituitary gland produces at least six different hormones.

The growth hormone (GH,STH), isolated and purified by Evans and Li in Berkeley, is now available only as prepared from human pituitaries. The supply therefore is extremely limited, but experimental trials have been promising. Attempts are being made to alter the beef growth hormone so that the molecule will approach the size of the human variety. If this preparation is biologically active in man it could provide a practical source of the hormone.

The thyrotropic hormone (TSH) is available as Thytropar® (Armour). Its principal use is in a test differentiating primary and secondary myxedema. After I^{131} uptake of the thyroid has been measured, TSH is administered in doses of 20 to 30 units daily for three days, and the uptake again measured. In normal persons the increase averages 20 per cent, in primary hypothyroidism the average is 7 per cent, while in secondary myxedema resulting from hypopituitarism the average increase of uptake is 32 per cent.

The gonadotropic hormones (follicle-stimulating hormone (FSH) and luteinizing or interstitial-cell-stimulating hormone (LH or ICSH)) are not available commercially in any satisfactory preparations. Gonadotropic effect can be obtained by using the chorionic gonadotropin from the placenta (APL,® Atuitrin S®). The same hormone extracted from the

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serum of pregnant mares (Equinex®) has been disappointing clinically.

Lactogenic hormone. I know of no available commercial preparation.

Corticotropin (ACTH) is available in several preparations, and of course is widely used. The aqueous extract is relatively quick acting, while the gel is slower, lasting about 24 hours. Corticotropin zinc, however, lasts as long as 36 hours and in my experience has been a satisfactory preparation, although it occasionally causes some local soreness.

Posterior pituitary hormones. Neither the undifferentiated extract or the separated components vasopressin (Pitressin®) and oxytocin (Pitocin®) are new, but the exciting news is that both of the latter have recently been synthesized; synthetic oxytocin is now available commercially as Syntocinon®.

The melanophore-stimulating hormone (MSH), presumably from the pars intermedia, is now under investigation and may prove useful in such skin conditions as vitiligo.

Thyroid

Desiccated thyroid remains the most important hormonal agent in treatment of hypothyroidism, being generally satisfactory and the least expensive. If this proves unsatisfactory, perhaps Proloid® should be tried; it is a somewhat purified thyroglobulin that is occasionally better tolerated, without as many side effects as from thyroid. My impression is that milligram for milligram it is not quite as potent. Among the synthetic preparations, thyroxin is most commonly used as Synthroid,® a sodium levo-thyroxin of which 0.1 mg. is the approximate equivalent of 0.065 gm. (or 1 gr.) of USP thyroid. Incidentally, the dextro form of this substance seems to have little effect on the metabolism and therefore may have some special value (in investigations reported by Starr it apparently reduced the blood cholesterol).

Now that paper chromatography and other methods have disclosed that thyroxin is not the only active element in desiccated thyroid, we are hearing a great deal about the newly isolated substances—triiodothyronine, available as Cytomel® (levo-triiodothyronine) and Trionine® (dextro-levotriiodothyronine). These are slightly different in effect, but both act through their levo isomers, and reach the peak of effect rapidly, being excreted within 24 hours. In contrast a single dose of thyroxin may exert an effect for two to three weeks. Desiccated thyroid, of course, contains both. Occasionally, if quick action is desired, the newer forms may be more desirable, but thyroid USP is adequate in most instances. The push to promote triiodothyronine has even brought us a new diagnosis—"hypometabolism," which came initially from advertising promotion rather than from the scientific literature. Whether this exists as a separate entity is now being debated; I doubt that there is justification for the new term.

In dealing with overactivity of the thyroid, we should not forget iodine, which can be helpful, although the thiouracils now are being widely used. Propylthiouracil is the most popular, although in cases in which toxic reactions occur—blood cell changes or rash—the patient may tolerate methylthiouracil. Also used is methimazole (Tapazole®), which is effective in smaller dosage. Finally, there is a product available which incorporates iodine into the thiouracil molecule, Itrumil,® which also is helpful in some cases.

Parathyroids

For hypoparathyroidism one would naturally consider using parathyroid extract. It is available but unfortunately it evokes an antibody response rather quickly and is therefore effective for only a short period before the antihormone effect is apparent. For long-term therapy of hypoparathyroidism we must still rely on vitamin D, AT-10, calcium and dietary measures.

Pancreatic Islets

A new preparation causing hyperglycemia is glucagon, with an effect opposite to that of insulin. It can terminate hypoglycemia if administered intramuscularly, 1 to 2 mg. being the usual dose, with the effect apparent within 5 to 30 minutes. The usual accepted therapy, intravenous administration of glucose, may be more difficult if the patient is so unruly that restraint is necessary while the needle is being put into the vein.

For diabetes, the lente insulins are reported to be somewhat less allergenic than NPH but with similar action and are now available also as semilente and ultralente, so that we have available some variation in duration of action.

Although carbutamide has been abandoned in this country, tolbutamide (Orinase®) has stood the test of time fairly well as an orally effective agent, particularly for older patients. The manufacturer now reports several hundred thousand patients have taken Orinase® without serious side effects. An occasional clinical difficulty is that of patients' forgetting to take the second dose in a day. Orinase® is apparently so easy to take that it is more difficult to remember than insulin. If the patients respond well to Orinase® they frequently have a sense of well-being, almost euphoria, which is new to them.

A newer arrival in this very active field of investigation is chlorpropamide (Diabinese®), which has a somewhat longer action so that a single dose can be taken in the morning for the entire day. It is occasionally effective when Orinase® is not. Phenfor-

min® (DBI) is the latest addition to the group of oral hypoglycemic agents.

Adrenals

Both as a test and a remedy for pheochromocytoma—the adrenal medullary tumor which produces excesses of epinephrine and norepinephrine—we have Regitine.® This is especially useful during surgical extirpation of the tumor, and counteracts the discharge of an excess of these hormones into the bloodstream from manipulation.

Among the adrenocortical hormones for Addison's disease the older injectable extracts, both in aqueous and oily solutions, were valuable for many years; also DOCA (desoxycorticosterone acetate) has a good salt-retaining effect and is still a fairly good treatment in some patients with Addison's disease. There is also desoxycorticosterone trimethylacetate (Percorten® trimethylacetate), which has a prolonged action and can be given intramuscularly every four to six weeks in doses of 50 to 75 mg. Although cortisone has simplified the treatment of this condition, it is generally accepted that it is still best to combine a cortisone-like steroid with one of the salt retainers, such as DOCA, or the more recent fludrocortisone (Florinef®).

For comparison of potency, we can consider a 25 mg. tablet of cortisone to be equal to 20 mg. of hydrocortisone, which is thought to be closer to the true secretion of the adrenal cortex. Prednisone, which appeared next as Meticorten®, and prednisolone (Meticortelone®), both are approximately equally effective in doses of 5 mg. After these came triamcinolone (Aristocort® and Kenacort®), used in doses of 4 mg. These latter drugs, particularly, did not cause as much fluid retention. The next to appear was methyl prednisolone (Medrol®), effective in doses of 2 to 4 mg. And the latest at this time is dexamethasone (Decadron,® Deronil,® Gammacorten®), with dosage of 0.5 to 0.75 mg. Unfortunately, even though the amounts are small, the prices are high on the newer drugs; cortisone and hydrocortisone are still useful and are generally the least expensive. Fludrocortisone is also potent in small doses—0.1 to 0.3 mg.—but because of its salt-retaining effects is best used with cortisone for better control of Addison's disease. Also worth mentioning is hydrocortisone hemisuccinate (Solucortef®), which can be injected either intramuscularly or intravenously in an emergency and may be lifesaving.

The pharmaceutical industry has shown an impressive ingenuity in offering combinations of these steroids. Among skin ointments for instance, Metiderm® first appeared with prednisolone; later it was offered with Neomycin. I received a brochure recently announcing a product called Neo-Cort-Dome® which contains hydrocortisone plus Neomycin; and another, Cort-Tar-Quin,® contained hydrocortisone, plus tar, plus hydroxyquinolone; yet another, Histacort-E,® included hydrocortisone, vitamin A and an estrogen.

For arthritis there is also an abundance of preparations, each combination, of course, having a copyrighted name, which is understandable. One of the latest is Stenisone® which contains prednisone plus an anabolic agent and a gastric protector. Aristogesic® is an Aristocort® combination with salicylamide, aluminum hydroxide and vitamin C. Sterazolidin® contains prednisone, Butazolidin,® magnesium trisilicate and homatropine methylbromide (an anti-cholinergic), all in the same tablet. Varied combinations are also available as nose drops, eye drops and so forth.

Testes

Following the synthesis of testosterone, the first product commercially available was testosterone propionate in oil for intramuscular injection; this is still a good preparation and is relatively inexpensive. Next available was methyltestosterone, which was effective when taken orally although in larger dosage, and is somewhat more effective when used sublingually or bucally. Then followed the long-acting testosterones which could be injected every two to four weeks. Depo-Testosterone® (cyclopentylpropionate) was the first. Then Ciba made available testosterone phenylacetate, called Perandren® phenylacetate, as a suspension of macrocrystals. One of the more recent is Squibb's enanthate form, Delatestryl.® A new form for oral administration is fluoxymesterone, which is available as Halotestin,® Oratestryl® or Ultrandren.® This is five to ten times as effective as methyltestosterone by weight, and therefore is available in 2 mg. and 5 mg. tablets rather than the usual 10 mg. Unfortunately it is not that much cheaper; but it is a good anabolic agent, although not as potent in sexual stimulation, and is effective when swallowed.

Ovaries

Among the estrogens, estrone was first made available as Theelin® by Parke-Davis. Later came Schering's Progynon® (estradiol), also available in the dipropionate and benzoate forms. More recently, estradiol valerate has been brought out by Squibb as Delestrogen.® It is an effective long-acting preparation which may be injected at two to four-week intervals.

In most cases oral administration is satisfactory —Premarin,® a conjugated form, is usually effective at a dose of 1.25 mg. daily. However, the synthetics are cheaper, including stilbestrol 0.5 to 1 mg., or dienestrol 0.5 mg. Ethinyl estradiol is the most po-

tent by weight, the usual dose being .05 mg. daily. This is available as Estinyl® and as Eticylol.®

In this field too, there are numerous combinations, such as Premarin® with meprobamate and a host of others.

Among the progestins, progesterone usually must be injected, although it has some value when taken sublingually. A long-acting progesterone now available is Delalutin,® (hydroxyprogesterone caproate). Among the preparations for oral use, ethisterone (Pranone,® Lutocylol®) has been used for a number of years; it has been pointed out that the chemical formula for this preparation can be written so that it looks like one for ethinyl testosterone, and the confusion is compounded by the fact that ethisterone does have a slight masculinizing effect. Norlutin® (norethindrome), an effective oral preparation, has recently been released by Parke-Davis, and another recent addition is Enovid® which is a progesterone combined with an estrogen derivative. The vaginal route has been suggested for administration of progesterone, but I believe there is seldom need for this, as other routes are satisfactory.

Sex hormones in combination are many. There are estrogen-progesterone combinations available as Cyclogestrin® and Prometron.® Numerous estrogen-androgen combinations are available and since these are used rather frequently for osteoporosis it might be worth while to name a few. Lilly combines stilbestrol and methyltestosterone as Tylosterone®; these are also combined with reserpine under the name of Tylandrin.® Dienestrol and methyltestosterone are offered by White as Estan®; I use it fairly often because it is relatively inexpensive. Ayerst offers Premarin® with methyltestosterone. The male hormone is also combined with ethinyl estradiol—Femandrin® (Ciba) and Gynetone® (Schering)—and with estrone or estradiol in Theelandrol® (Parke-Davis), Combandrin® (Pfizer) and Dumone® (Squibb). Dela-Dumone® is an injectable long-acting estrogen-androgen combination of testosterone enanthate and estradiol valerate. Upjohn combines Halotestin® and estradiol as Halodrin® for oral administration; it may have some advantage in being slightly less virilizing in women, although it can cause enlargement of the clitoris.

As an example of adding extra items to a known effective combination in order to have a distinctive proprietary name, Ayerst combines Premarin® and methyltestosterone, then adds 400 mg. of vitamin C to make a preparation called Formatrix.®

For senility, a number of shotgun preparations are available. There have been some studies of sex hormone therapy which seem to justify use in the elderly—not only to help osteoporosis, but to improve senile changes in the skin and sometimes cause a general feeling of well-being. Accordingly, in Mediatric,® Ayerst includes a small dose of Premarin,® a small dose of methyltestosterone, and also vitamins, iron and desoxyephedrine—for a lift. One on which I was recently detailed is Eldec® of Parke-Davis, which contains Theelin® as an estrogen, plus some methyltestosterone, plus some pancreatin, plus other digestive ferments, plus vitamins and plus minerals!

DISCUSSION

Dr. Allan Hinman (chairman): I happen to be on the advertising committee of California Medicine, which I think is the busiest committee of the state association. We meet once a week for two hours to ponder the claims made for new pharmaceuticals. We have a rather long list of rules that might be summed up as, "We will permit the truth to be stretched but not shattered." Sometimes even this line is hard to draw, because the men who write these ads are very adept. We spend most of our time on combinations.

We've received two questions for Dr. Escamilla: "What are the advantages, if any, of the new brominated form of desiccated thyroid?"

Dr. Escamilla: This is not particularly new. Thyrobrom® has been available for at least 20 years as I recall. It is said to relieve nervousness in the patient who otherwise would not receive the full benefit of desiccated thyroid, and is a combination that should not be used except in very special cases. Ordinarily, if side effects limited the necessary dose of thyroid I would try Proloid,® and if that is unsatisfactory try the triiodothyronines. The bromide combination, of course, carries the danger of bromism.

Dr. Hinman: Another question: Does the expression "more potent, milligram for milligram" signify any practical advantage? Why not simply use a larger dose of a less potent form?

Dr. Escamilla: This expression is heard frequently. The choice depends on whether the more potent form has the same effect and whether it presents other advantages. Among the adrenal steroids, for example, hydrocortisone in a 20 mg. dose and triansinolone 4 mg. have about equal effect in many ways, but the hydrocortisone causes more fluid retention, and therefore the more potent form has an advantage.

There is always hope, too, that the drug effective in smaller dosage will be cheaper for the patient, but it seldom works out that way. The pharmaceutical companies seem to figure that if 2 mg. of their product is as good as 10 mg. of another it should cost the same, or more, and we lose an advantage which I think should accrue to the patient.

384 Post Street, San Francisco 8.

Pheochromocytoma

A Report of 12 Cases

FRANK de M. HILL, *M.D.*, and DONALD R. SMITH, *M.D.*, San Francisco

• **In a series of 12 cases of pheochromocytoma, 11 patients were clinically cured by operation and one died of malignant tumor.**

It has been reported that of patients presenting with hypertension, 0.5 to possibly 2 per cent will be found to have pheochromocytoma. This small group of patients will have a good chance of cure of hypertension by surgical removal of the tumor.

Hypertension and manifestations of hypermetabolism are classically seen in pheochromocytoma, but these symptoms vary, and hypertension may be entirely absent.

Hypertension which is no longer dependent on pressor amines may result after prolonged circulation of pressor substances in the bloodstream. The quantity and proportion of the pressor amines in the circulation are largely responsible for the variable clinical picture.

The Regitine® test is an excellent screening test but is not absolutely specific for pheochromocytoma.

The histamine test should not be employed in patients whose blood pressure exceeds 160/110 mm. of mercury, lest it set off cerebrovascular accident.

A modification of the Garlock transdiaphragmatic incision that was used in the present series of cases affords unparalleled exposure and facility in the removal of pheochromocytoma.

THE OCCASIONAL REPORT concerning the clinical features of a particular case of a rare tumor of the endocrine system is likely to lack general interest if it has been established that tumors of the particular kind in question follow a uniform clinical pattern. Certainly pheochromocytoma masquerading as essential or "labile" hypertension, as diabetes mellitus, as thyrotoxicosis or occasionally as a psychoneurosis does not fall into this category. The series of 12 cases here presented is reported in the hope that a more precise clinical picture will eventually be formed.

Pheochromocytoma derives its name (*phaios*, dusky; *chroma*, color) from the dark brown color which most chromaffin tumors assume when treated with potassium dichromate. As a clinical entity, pheochromocytoma is comparatively new, the first case having been reported in 1886 by Fränkel, who observed bilateral adrenal medullary tumors at autopsy in a girl of 18 who died in coma. The first correct preoperative diagnosis and successful removal of a pheochromocytoma is credited to Pincoffs[7] in 1929. In the same year, Rabin determined the amount of epinephrine in a pheochromocytoma and, finding it to be in excess of that in the normal adrenal medulla, ascribed the clinical symptoms to this change.[13]

Pheochromocytoma is relatively rare—a total of approximately 325 cases reported to date. In patients in whom the presenting symptom was hypertension, the incidence was estimated by Smithwick to be 0.5 per cent.[9] Other investigators have thought the incidence in such cases may be 2 per cent or even higher. This constitutes a small, but potentially curable group of hypertensives and is in marked contrast to the balance of patients (except those with unilateral renal artery disease) for whom there remains only palliation. Three instances of pheochromocytoma have been reported in two members of a family, and Roth[8] reported bilateral tumors in three siblings. We include in this series two siblings who had this tumor and whose father had bilateral pheochromocytoma.

SYMPTOMS

In patients with pheochromocytoma the classical presenting feature is paroxysmal or sustained hypertension. Sweating, palpitations, anxiety, severe headache, flushing, nausea and vomiting are frequent symptoms. Other associated phenomena include paresthesias, thoracic or abdominal pain, cold, clammy or blanched extremities, as well as gradual impairment of vision, pronounced congestive failure or cerebrovascular accident which eventually develops unless the tumor is removed. The clinical complex of symptoms is extremely variable; many of the symptoms that are usually present, including hypertension, may be entirely lacking in some cases. A young tumor will generally give rise to less frequent periods of acute symptoms and more clinically dormant phases than an older tumor. After long periods and repeated attacks, the patient may acquire persistent rather than paroxysmal hypertension because of irreversible renal changes.[3] Not only do the duration and frequency of paroxysms influence the symptom complex, but also the probably constantly varying amounts and proportion of the vasospastic hormones play an important role.

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The frequency of attacks varies from ten or more per day to an isolated episode every few months. Most of the patients in the present series had paroxysms three or four times a week. Paroxysms usually lasted 5 to 10 minutes, occasionally longer, sometimes for only a few seconds. A variety of stimuli causing discharge of pressor amines from the tumor have been observed, among them changes in posture, pressure over the tumor, emotion, overindulgence in eating, shock, sneezing, singing and even voiding.

PATHOPHYSIOLOGY

Epinephrine alone was originally thought to be responsible for the symptoms of pheochromocytoma, this pressor substance being liberated from the adrenal tumor into the circulation. It was soon evident, however, that certain features of a typical attack were not explainable on the basis of the epinephrine effect alone. In 1949 Holton[4] discovered norepinephrine in normal adrenal medullary tissue, as well as in pheochromocytoma; and in the latter, concentration of norepinephrine could exceed that of epinephrine tenfold. Since then, the discovery and differentiation of pressor amines in the circulation have helped to explain the source and mechanism of an individual attack.

Epinephrine alone administered intravenously produces most of the manifestations of a typical paroxysm—abrupt rise in systolic blood pressure, anxiety, mydriasis, blanching of hands and feet, tachycardia, dyspnea and sweating, probably through sympathetic excitation. Norepinephrine in therapeutic doses has been shown to cause an increase in diastolic and systolic blood pressure and bradycardia but with few other subjective symptoms. The attempt at correlation of symptomatology with pressor analysis of the pheochromocytoma was more difficult until Goldenberg[2] and co-workers in 1950 demonstrated the difference in response to small and large doses of the two amines given intravenously to dogs. This study suggested that the tumor's pressor amine secretion could fluctuate in quantity and probably also in quality irrespective of the analysis of pressor content of the tumor, and consequently produce varying symptoms.

Patients with an intermittently discharging pheochromocytoma usually have paroxysmal hypertension, while others with a constant secretion of pressor amines have sustained hypertension. Goldenberg in 1950 found that intermittent or continuous discharge of pressor amines could be associated with persistent hypertension, implying that after prolonged circulation of pressor substances in the blood the ensuing hypertension may no longer depend on the circulating amines.

Symptoms of sustained hypermetabolism but paroxysmal hypertension may be explained on the assumption that a basal epinephrine secretion adequately meets the needs of hypermetabolism but is insufficient to produce the hypertension until epinephrine secretion increases suddenly.[6]

DIAGNOSIS

Pharmacological tests help greatly in the diagnosis of pheochromocytoma. Following the establishment of a patient's base-line blood pressure a cold pressor test is performed, followed by a histamine test. If the systolic and diastolic pressures rise roughly 60 mm. and 30 mm. of mercury, respectively, the result is "positive" provided the readings are in excess of that of the cold pressor test. This comparison will rule out the "hyper-reactor," as shown by Roth and Kvale.[5,8] We restrict the histamine test to patients whose blood pressure does not exceed 160/110 mm. of mercury and thereby reduce the incidence of catastrophes such as cerebrovascular accidents which can result from extreme pressor responses.

Regitine® has been used in most of the cases in this report. We have found it to be an easily administered and safe drug and well suited to a routine screening test. If pheochromocytoma is suspected and the blood pressure exceeds 170/110, Regitine® is the drug of choice for a screening test. The result of the test is "positive" if there is a decrease of more than 35 mm. of mercury in systolic and 25 mm. diastolic readings, both occurring within two minutes after intravenous injection.

The quantitative assay of pressor amines in the blood is the most direct and precise aid at present in diagnosis. The specimen of blood must be taken during or immediately following an acute episode if the results are to be significant. The normal values vary with the different laboratories but generally range from 3.5 to 5 micrograms of norepinephrine and about 0.5 micrograms of epinephrine per liter of blood as upper limits of normal.

During a normotensive phase, a rise in blood pressure may be brought about by the intravenous administration of 0.025 mg. or less of histamine base. If a blood specimen is drawn at the height of the blood pressure rise, levels of catechol amines of more than 20 micrograms per 100 cc. indicates the presence of a pheochromocytoma.

Urinary catechol amines are also of diagnostic significance. They will be found only in specimens taken during a period of active secretion by the pheochromocytoma. In the past these have been reported as total catechol amines assayed by a fluorometric technique. More recently, separate determination of the urinary epinephrine and norepinephrine has become available. Normal excretion should not exceed 50 and 200 micrograms per 100 cc., respectively, for these substances.[2,11,12]

An invaluable aid in the diagnosis of pheochromocytoma is intravenous pyelography. It should be carried out to supply one of the pieces of evidence which should be assembled before diagnosis is made. If the tumor is large enough, it will usually be seen as an ovoid soft tissue mass in the region of the adrenal gland and occasionally overlying a kidney. However, one must be careful not to misinterpret fluid in the stomach as a left suprarenal mass. The tumor will frequently displace the longitudinal calyceal axis of the kidney laterally and inferiorly. We believe that, excepting an obvious adrenal tumor mass seen on pyelography, the described change in axis of the calyces of a kidney, even to a slight degree, is the most suspicious sign of adjacent tumor mass. Calyceal distortion is rarely seen in pheochromocytoma and, barring primary renal lesions, would indicate invasion of renal parenchyma by malignant tumor.

If better delineation of perirenal structures is desired, we have used retroperitoneal oxygen insufflation and tomography with excellent result.[10] If such procedures or the pyelogram localize a suprarenal tumor, they become valuable aids to the surgeon in selection of an operative approach.

In the present series aortography has been employed on one occasion only (Case 7). In that case the procedure localized a very small tumor not seen in pyelographic or in oxygen studies. As a rule aortography is considered to be not without significant hazard in pheochromocytoma, for the added trauma may precipitate a fatal hypertensive attack.

SURGICAL ASPECTS

The recording of the blood pressure of the patient with pheochromocytoma at 1 or 2-minute intervals before and during all phases of anesthesia and operation is imperative and frequently lifesaving. In addition to the anesthetist, one member of a medical team of two persons records the blood pressure and the other controls the intravenous administration of fluids. We have used a blood pressure cuff in the past, but in our most recent case we resorted to a continuous arterial pressure-recording device, which necessitated brachial arteriotomy and catheterization. The removal of the pheochromocytoma in that case was uneventful. However, in the evening of the operation the patient complained of severe ischemic pain in the forearm, and the radial and ulnar pulses were absent. When an arteriogram revealed a complete block in the brachial artery just proximal to the bifurcation, the artery was again opened and thrombectomy performed. Following this the edema, numbness and duskiness of the hand and forearm gradually resolved. While arteriotomy is usually not considered a hazardous procedure, we feel that the intermittent blood pressure recording with a cuff is more than adequate and entails no risk whatsoever.

During the period between induction of anesthesia and the postoperative phase, the blood pressure is controlled by intravenous administration of Regitine® or Levophed® (L-norepinephrine) or 5 per cent dextrose and water, as needed. Characteristically, the blood pressure fluctuates throughout operation, rising perhaps with induction of anesthesia or the skin incision. A maximal rise usually occurs as the tumor is palpated and sporadic decreases then occur as the veins of the tumor are ligated. Pronounced hypotension is usually noted on removal of the tumor.

We favor the Garlock transdiaphragmatic approach for a pheochromocytoma that is demonstrated radiographically to be unilateral. Our modification of this incision is to make it between the ninth and tenth ribs with division of the costal cartilage. This affords unparalleled access and exposure for the surgeon and facilitates ligation of the veins from the tumor. Troublesome bleeding occasionally encountered from the vena cava is also more easily controlled. Also with this approach there is minimal palpation of the tumor mass during the dissection. This is an important consideration because, besides the likelihood of causing severe hypertension, palpation can easily lacerate the thin fibrous capsule of a pheochromocytoma and allow extrusion of the soft vascular tumor tissue into the retroperitoneal space. In light of the fact that some 10 per cent of pheochromocytomas are malignant, excision should be as meticulous as any procedure for the removal of a tumor known to be malignant.

For dealing with a pheochromocytoma that cannot be demonstrated by radiographic studies to lie in the suprarenal areas or with a tumor suspected of being bilateral, we would prefer an elongated paramedian abdominal incision extending from xiphoid process to symphysis pubis. This again offers maximal exposure for exploration of both adrenal areas as well as the abdominal cavity. Since the tumor may lie in any area where chromaffin tissue is found, a thorough abdominal exploration, including close inspection of the great vessels and the base of the small bowel mesentery, is indicated. Pheochromocytomas have been found in the urinary bladder, in the chest and in other areas, but these are rare.

REPORTS OF CASES

Case 1. A 46-year old white male truck driver was admitted to the University of California Hospitals on January 24, 1944. In the preceding four years he had had "spells" consisting of dizziness, nervousness, palpitations, a slow, pounding pulse, headache and occasional nausea and vomiting. These episodes occurred about five times a day and lasted 8 to 10 minutes. The diagnosis at that time was acute anx-

iety state with hyperventilation syndrome and the patient was referred to the psychiatric clinic.

The patient was readmitted on January 15, 1947, after being observed in a typical attack in a physician's office. The patient had suddenly become anxious, his head and neck became cyanotic and his blood pressure rose from 150/90 to 250/110 mm. of mercury and then dropped to normal 3 minutes after the attack began.

No abnormalities were noted on physical examination. The blood pressure was 160/80 mm. of mercury and the pulse rate 64. The results of routine laboratory tests were within normal limits. A histamine test was positive for pheochromocytoma. A glucose tolerance test was positive for increased epinephrine production. An electrocardiogram was interpreted as showing left ventricular hypertrophy, and in intravenous pyelograms a large right suprarenal mass was seen pressing the right kidney downward and laterally.

On February 1, 1947, through an incision over the bed of the twelfth rib, a pheochromocytoma lying beneath the remains of a grossly normal right adrenal was excised. The tumor weighed 490 gm. and contained 200 ml. of bloody fluid within a large cyst.

The postoperative course was fairly smooth and the patient was having no symptoms when he was discharged on the 17th postoperative day. As of his last letter in November, 1958, the patient continued to feel well and had worked steadily since discharge.

Case 2. A 25-year old white housewife who was admitted to the University of California Hospitals on March 11, 1948, had been in excellent health until two and a half years before when she had episodes of blurry vision lasting 10 or 15 minutes, occasionally accompanied by typical Jacksonian seizures beginning in the left hand and associated with syncope. She was told by a physician on one occasion that her blood pressure during an attack was 240. Shortly before admission she began to have frequent occipital headaches, tinnitus, dyspnea on exertion and palpitations. She had had about 12 such attacks.

At the time of the physical examination the patient was noted to be slender and nervous and apparently not in acute distress. The blood pressure was 186/130 mm. and the pulse rate 108. The skin was flushed and the patient was perspiring. A loud systolic murmur and precordial thrust were noted. Routine laboratory tests revealed no abnormalities. An electrocardiogram was interpreted as showing left ventricular hypertrophy and sinus tachycardia.

A diagnosis of essential hypertension was made and a first stage left thoracolumbar sympathectomy was done March 17, 1948. On April 8, 1948, during the second stage right sympathectomy, a pheochromocytoma about 4 cm. in diameter lying just beneath a normal appearing right adrenal was discovered and excised. Symptoms did not recur in ten years of observation.

Case 3. A 35-year-old white housewife, first admitted to the University of California Hospitals on May 15, 1952, said that she had had hypertension for three years. It was discovered first at the time of her first pregnancy. Later the patient experienced excessive perspiration, insomnia, nervousness and irritability, which had begun during her second pregnancy the following year. She also became aware of thirst, polyphagia, frequency of urination and moderate intolerance of heat. Previous to admission to hospital, a diagnosis of hyperthroidism had been made (basal metabolic rate of plus 72), and the patient had been given propylthiouracil under her physician's care, but her condition did not improve.

On physical examination it was noted that the patient was pale and obese. She perspired profusely and had cold clammy skin. The blood pressure was 130/90 mm. of mercury and the pulse rate was 110.

Results of routine laboratory tests were within normal limits. Intravenous pyelograms showed possible enlargement of the left adrenal gland. Results of cold pressor, benzodioxane and mecholyl tests were negative for pheochromocytoma. No abnormality was noted in a retroperitoneal oxygen study. Following mecholyl injection, the patient had crushing substernal pain; later, electrocardiographic changes suggested myocardial infarction. The patient then left the hospital against medical advice.

She was readmitted July 15, 1953, with progressive and severe symptoms of sweating, headache and impairment of vision of the right eye of one week's duration. A Regitine® test at this time was positive for pheochromocytoma. Intravenous pyelograms and retroperitoneal oxygen studies revealed a 7 cm. mass overlying the left kidney and displacing its upper pole laterally.

While awaiting operation, the patient noted beginning impairment of vision of her left eye. Intramuscular administration of 5 mg. of Regitine® every 6 hours was started to control hypertension.

On August 13, 1953, through a left Garlock transdiaphragmatic incision in the 9-10 interspace a well-encapsulated pheochromocytoma overlying the anterior aspect of the renal pedicle was removed. The tumor weighed 67 gm. and was 6.5 cm. in diameter. As the adrenal gland appeared to be normal and entirely separate from the tumor, it was not removed.

It was necessary to give Levophed® intravenously only during the first postoperative day and the patient was discharged on the ninth postoperative day.

When last examined in October, 1958, she had no symptoms and the blood pressure was 110/70 mm.

Case 4. A 43-year-old white male pharmacist who was admitted to St. Luke's Hospital, San Francisco, on April 2, 1954, had had intermittent and severe attacks of nervousness, sweating, palpitations, upper abdominal discomfort and flushing of the face over a period of two years. The attacks lasted 10 to 20 minutes and occurred at about weekly intervals.

On physical examination this patient was observed to be nervous and hyperactive. The blood pressure was 160/110 mm. of mercury and the pulse rate 112. The facial skin was flushed, while that over the knees and elbows was decidedly cyanotic in blotchy areas. An active precordial heave was present.

On the second hospital day the blood pressure was 235/135 mm., then fell to 160/105 mm. within 10 minutes. During this hypertensive phase the patient was anxious and perspired profusely.

Abnormalities noted in laboratory tests included 4 plus proteinuria, leukocytes numbering 20,000 per cu. mm. A basal metabolic rate of +47, blood sugar content (fasting) 137 mg. per 100 cc. and nonprotein nitrogen of 65 mg. per 100 cc. The Regitine® test was positive for pheochromocytoma. A retroperitoneal oxygen study revealed a large tumor mass overlying the superior pole of the right kidney (Figure 1). The left adrenal gland was believed to be of normal size, although visualization was hampered by dilated loops of bowel.

On April 6, through a right Garlock transdiaphragmatic approach, a 200 gm. ovoid tumor measuring 10 x 8 x 4 cm. and enclosed by a thin ragged capsule was removed. The pathologist reported the tumor to be a malignant pheochromocytoma, with tumor cells invading the adrenal cortex.

It was necessary to maintain the patient's blood pressure with Levophed® until the fourth postoperative day when episodes of pronounced hypertension developed (blood pressure 240/170 mm. of mercury) with sweating, pallor, anxiety and increasing abdominal distention. X-ray examination with oxygen insufflation was repeated on April 16, and another large ovoid tumor mass was seen overlying the upper pole of the left kidney. This tumor had previously been erroneously thought to be a loop of bowel. The patient's family refused further operation, and death due to congestive heart failure followed within a week.

At autopsy a pheochromocytoma of about the same size as the one found on the right side, was observed above the kidney on the left. Hepatic metastatic lesions presumably secondary to the malignant right pheochromocytoma were also discovered.

Case 5. A 71-year-old white woman entered St. Luke's Hospital, San Francisco, on March 5, 1955. She had had increasing attacks of nervousness, weakness, sweating, flushing, thirst and a ten-year history of poorly controlled diabetes mellitus and hypertension.



Figure 1 (Case 4)—Retroperitoneal oxygen study showing large bilateral pheochromocytomas. The left tumor was at first mistaken for a segment of dilated bowel.

Upon physical examination she was observed to be thin, prostrated and sweating profusely. The blood pressure was 210/110 mm. of mercury and the pulse rate 120. Except for evidence of cardiac enlargement no other abnormalities were noted. The blood sugar (fasting) was 296 mg. per 100 cc. and results of Regitine® and benzodioxan tests were positive. Intravenous pyelograms and retroperitoneal oxygen studies showed a mass 7 cm. in diameter overlying the superior pole of the left kidney.

On March 24, 1955, a 45 gm. pheochromocytoma was removed through a Garlock transdiaphragmatic incision between the ninth and tenth ribs. It was necessary to give Levophed® by slow infusion until the third postoperative day, and thereafter the course was uneventful. The patient was discharged from the hospital on the 21st postoperative day, with no symptoms. When she was examined thereafter no evidence of recurrence of the previous symptoms or glycosuria were noted and the blood pressure was within normal limits.

Case 6. A 17-year-old white girl was admitted to the University of California Hospitals on July 6, 1955, with a history of intermittent attacks one to nine times a day consisting of headache, palpitations, nausea, vomiting, a sensation of numbness and paresthesia in both lower extremities, and sweating. These episodes lasted 3 to 10 minutes.

Her father had died at age 57 of a "stroke" and at autopsy was found to have bilateral pheochromocytomas. Her brother (see following case) also was later found to have a pheochromocytoma.

No abnormalities were noted upon physical examination. The blood pressure at the start of the examination was 160/90 mm. of mercury but rose shortly to 225/130 mm., and the rise was accompanied by substernal pain and sweating.

Results of laboratory studies were within normal limits. An electrocardiogram tracing was abnormal but nonspecific. The catechol assay of a 24-hour urine collection was 1,000 micrograms.

On July 13, 1955, a 250-gram pheochromocytoma was removed from the left adrenal area through a left Garlock transdiaphragmatic incision between the ninth and tenth ribs. The postoperative course was uneventful and vasopressors were not required.

A year and a half after the patient was discharged from the hospital, transient episodes of weakness, occasional headache and light-headedness, lasting 2 to 3 minutes, developed. Further studies were done but no evidence of another pheochromocytoma was found.

CASE 7. A 20-year-old white man, a laboratory technician, was admitted to the University of California Hospitals on July 9, 1955, at the prompting of his sister (see Case 6) because of a three-year history of recurrent attacks of palpitations, blanching of face and hands, tremor, numbness and tingling of the lower extremities and sweating. The attacks occurred 10 to 15 times a week and were of 5 to 20 minutes' duration. His sister had just been operated on for removal of pheochromocytoma at this hospital and his father at age 57 had died as the result of a cerebral vascular accident as a complication to bilateral pheochromocytomas discovered at autopsy.

On physical examination he appeared to be healthy and in no acute distress. The blood pressure was 135/80 mm. of mercury and the pulse rate 80. A grade II apical blowing systolic murmur was the only abnormality noted. Results of routine laboratory tests were within normal limits and no abnormalities were observed in pyelograms or in a retroperitoneal oxygen study. The results of a histamine test, glucose tolerance test and urinary catechols on two occasions were equivocal. The patient was discharged without a diagnosis of pheochromocytoma having been made.

He was readmitted on December 2, 1957, with complaint of more severe symptoms and more frequent attacks. A histamine test was strongly positive for pheochromocytoma; the blood pressure rose to 230/130 mm. of mercury from 120/80. Again intravenous pyelograms and retroperitoneal oxygen studies showed no abnormalities but an aortogram revealed a small tumor in the region of the right adrenal gland. On December 19, 1957, a 3 x 1.5 x 1.5 cm. pheochromocytoma was removed from the right suprarenal area through a right Garlock transdiaphragmatic incision between the ninth and tenth ribs. The patient made an excellent recovery and vasopressors were not given postoperatively. When last examined, in November, 1958, he was asymptomatic. The blood pressure was 120/85 mm.

CASE 8.* A 55-year-old white housewife was admitted to the University of California Hospitals on March 10, 1956, because of severe headaches, warm flushes and "choking sensations" during the preceding six months. These episodes occurred daily, usually lasting 5 minutes, and were precipitated when she lay on her left side. She had undergone total left and partial right adrenalectomy previously for Cushing's syndrome. At that time severe diabetes, virilization, with elevated 17 ketosteroids and 17 hydroxycorticoids had been noted and the diagnosis of Achard-Tiers syndrome had been made.

On physical examination the patient appeared to be healthy and to have no residual of Cushing's syndrome. The blood pressure was 165/85 mm. of mercury and the pulse rate was 88. There were no remarkable physical findings.

No abnormalities were seen in retroperitoneal oxygen studies. The basal metabolism rate and an electrocardiogram were within normal limits.

Shortly after admission the patient had an attack of hypertension, with blood pressure at 240/180 mm. of mercury for 10 minutes. A subsequent Regitine® test was positive for pheochromocytoma and urinary catechols were 1,100 micrograms in a 24-hour urine collection.

On March 27, 1956, the patient underwent operation, and through an upper transverse abdominal incision a pheochromocytoma 5 cm. in diameter that lay amidst the remnants of the right adrenal gland and was intimately adherent to the vena cava was removed. The patient made an uneventful recovery. Vasopressors were given until the fourth postoperative day. The patient was maintained on complete adrenal cortical replacement therapy, and when examined 20 months after the operation was having no symptoms. The blood pressure was 110/80 mm.

CASE 9.† A 59-year-old white male school teacher was admitted to the University of California Hospitals on June 17, 1956. For a year he had had paroxysmal bouts of palpitations, headaches, spots before his eyes, substernal ache, dizziness, weakness and tremor. The attacks varied in intensity, lasted 1 to 30 minutes and occurred at least once daily.

On physical examination the patient was observed to be thin. The blood pressure was 120/70 mm. of mercury and the pulse rate was 72. During rectal examination a typical attack suddenly developed with

*Courtesy of Doctors Peter Forsham and Maurice Galante.
†Courtesy of Dr. Frank Hinman, Jr.

a rise in blood pressure to 260/150 mm. This episode lasted 20 minutes.

A hemogram, urinalysis, fasting blood sugar and protein bound iodine were within normal limits. A urinary catechols assay revealed a borderline elevation of 160 micrograms in 24 hours. Histamine and Regitine® tests were positive for pheochromocytoma.

Tomograms of the adrenal glands suggested a tumor mass in the right adrenal area. In a retroperitoneal oxygen study an ovoid tumor 3 cm. in diameter was seen lying adjacent to the right adrenal.

On June 26, 1956, a right Garlock transdiaphragmatic incision was made between the ninth and tenth ribs and a pheochromocytoma 3 cm. in diameter lying posterior and medial to the adrenal gland was excised together with the right adrenal. The specimen weighed 19 gm.

The patient was dismissed from the hospital asymptomatic and with a blood pressure of 110/70 mm. of mercury on the tenth postoperative day.

Two years later he was readmitted to this hospital for transurethral prostatectomy. The blood pressure at that time was 120/80 mm. of mercury. The course of his stay in hospital was entirely uneventful.

CASE 10.‡ A 35-year-old white housewife admitted to the University of California Hospitals on March 30, 1957, complained of paroxysmal attacks of epigastric pain, palpitations, sweating and headaches occurring at very irregular intervals during the preceding two years and lasting 5 to 20 minutes. The physician who referred her had noted a labile blood pressure varying from 140/95 to 190/110 mm. of mercury during one visit.

The patient was an anxious, hyperreactive, well developed woman. The blood pressure was 125/90 mm. of mercury and the pulse rate 100. Upon cardiac examination, a forceful ventricular heave, cardiac enlargement and a systolic apical murmur were noted. An electrocardiogram revealed anterior myocardial ischemia. A hemogram and results of urinalysis were within normal limits. Results of histamine and Regitine® tests were positive for pheochromocytoma and the excretion of urinary catechols was reported to be 1,000 micrograms in 24 hours. Intravenous pyelograms and retroperitoneal oxygen studies revealed slight downward and lateral displacement of the upper pole of the kidney with a tumor mass 10 cm. in diameter lying just anterior to the kidney. On April 9, 1957, the patient was taken to the operating room, but immediately after she was transferred to the operating table, it became apparent that she had had incomplete right hemiparesis. The operation was postponed for ten days, the hemiparesis having almost disappeared by then. Through an extra-pleural eleventh rib approach a pheochromocytoma about 10 cm. in diameter was removed. Vasopressors were used until the third postoperative day. The patient was dismissed from the hospital asymptomatic on the 16th postoperative day. The blood pressure was then 110/70 mm. of mercury, and urinary catechol content was normal. She received physiotherapy for slight residual of the right hemiparesis.

‡Courtesy of Dr. Frank Hinman, Jr.

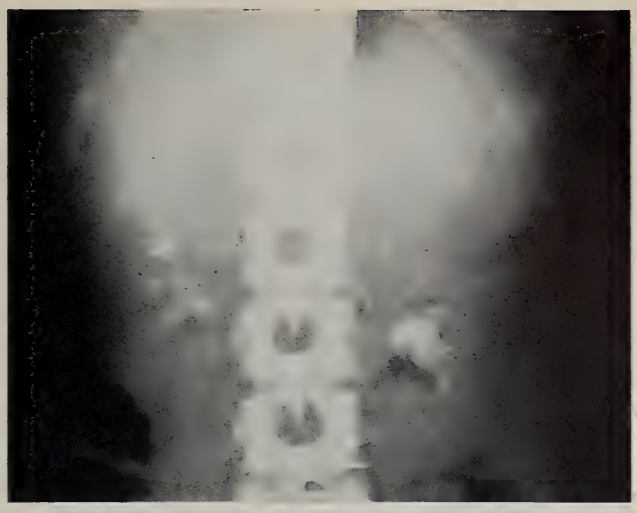


Figure 2 (Case 11)—Pyelogram demonstrating downward and lateral displacement of left kidney from a suprarenal mass.

CASE 11. A 53-year-old white saleswoman was admitted to the University of California Hospitals on June 15, 1957. She had had recurrent attacks of dizziness, weakness, palpitations, sweating, and headaches with occasional nausea and vomiting in the preceding four months. She said she had been "nervous" all of her life and had been told she was hypertensive five years before. The attacks occurred two to three times a day and lasted 10 to 30 minutes.

The patient was thin and anxious. The blood pressure was 160/85 mm. of mercury and the pulse rate 100. There was evidence of cardiomegaly and a Grade II systolic murmur was heard over the precordium. The results of urinalysis and of a hemogram were within normal limits. Significant findings included a Regitine® test positive for pheochromocytoma. The content of catechols in a 24-hour specimen of urine was 500 micrograms. During intravenous pyelograms the patient's blood pressure soared suddenly to 250/170 mm. and she had a typical attack. The pyelograms showed a suprarenal mass 10 cm. diameter displacing the left kidney downward (Figure 2). On June 28, 1957, through a left Garlock transdiaphragmatic incision, a large pheochromocytoma was removed. It was necessary to give the patient 400 mg. of Regitine® intravenously during a two-hour period in the operating room before the blood pressure descended to a level permitting induction of anesthesia. Levophed® drip was required

for only two hours postoperatively, and the postoperative course was benign. Four months after operation labile hypertension was noted, with blood pressure as high as 190/100 mm., but the urinary catechol assay was within normal limits. No evidence of another pheochromocytoma was discovered and the patient remained essentially asymptomatic.

Case 12. A 17-year-old white single female was admitted to the University of California Hospitals on December 21, 1958. Four months previously, sweating, dizziness and nausea had occurred when she was singing in church. She also noted substernal pain, aggravated by exercise or deep breathing, as well as polydipsia and severe frontal headaches and night sweats. These attacks usually persisted for 1 to 3 minutes. This condition had been diagnosed as diabetes by a physician six weeks before her admission to the hospital, and she had been found to have Kimmelstiel-Wilson retinopathy and an abnormal glucose tolerance curve.

The patient was normal-looking and apparently in no acute distress, with a blood pressure of 150/110 mm. and a pulse rate of 80. The skin was generally moist. On examination of the eyegrounds, flame shaped hemorrhages, exudates and papilledema of the left fundus were noted. Cardiac examination revealed a precordial thrust and a Grade I systolic blowing murmur at the apex.

Leukocytes numbered 15,000 per cu. mm. of blood, 80 per cent polymorphonuclear cells. The sedimentation rate was 22 mm. in one hour. The basal metabolism rate was plus 52. A Regitine® test was strongly positive for pheochromocytoma. The plasma norepinephrine was elevated to 16 micrograms/liter and the plasma epinephrine to .58 micrograms/liter. The only abnormality observed in intravenous pyelograms was a slight axis deviation on the right, but retroperitoneal oxygen studies revealed a mass measuring 6 x 5 x 4 cm. overlying the right kidney in the adrenal area (Figure 3).

On December 30, 1958, a pheochromocytoma intimately adherent to the right adrenal was removed through a right Garlock transdiaphragmatic incision. The tumor weighed 30 gm. It was not necessary to give vasopressors postoperatively, and the patient's blood pressure stabilized at 170/100 mm. of mercury. Results of histamine and Regitine® tests and urinary catechol assay after operation did not suggest the presence of another pheochromocytoma.

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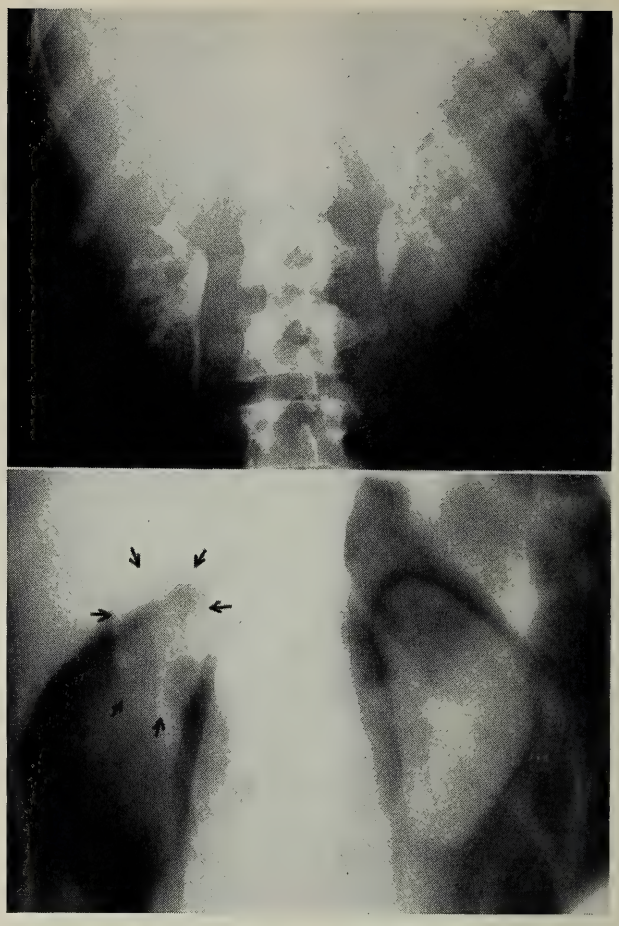


Figure 3 (Case 12)—*Above:* Pyelogram revealing abnormal vertical calyceal axis of right kidney and normal oblique axis on left. *Lower:* Retroperitoneal oxygen study showing right pheochromocytoma.

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Vomiting as a Symptom of Serious Disease In Infants and Children

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• **Vomiting or its lesser stages—anorexia, nausea—is a prime symptom of the most serious surgically curable diseases of childhood.**

In the newborn, when vomitus is green, abdomen scaphoid, and erect roentgen view shows air-fluid levels in stomach and duodenum with gas beyond, partial duodenal obstruction is present and midgut volvulus with malrotation is likely enough to justify immediate exploration.

In infancy, vomiting is a clear sign of intussusception when associated with intermittent colicky pain, palpable mass and "currant-jelly" feces. These symptoms are not always present, and if there is blood in the feces, barium enema study must follow. In further doubt, exploration may be justified.

In childhood, a common early symptom of appendicitis is vomiting accompanied by pain without any complete remission. Constipation is frequent but diarrhea may occur and contribute to an impression of gastroenteritis. Complete and repeated physical examination, with a history of the above symptoms, should lead to correct diagnosis.

STEADY ADVANCES in abdominal surgery are an outstanding feature of pediatric progress in the past decade. Digby Leigh and Katherine Belton of the Los Angeles Children's Hospital pioneered in pediatric anesthesia with the circle filter and the nonbreathing valve for infants, thereby eliminating dead space and making anesthesia safer. Endotracheal intubation was a further step in delivering more oxygen and less anesthetic, and the relaxant drugs contributed further to this end, besides producing better relaxation of the abdominal muscles. Hypothermia has been used to advantage in the desperately ill, febrile child with intestinal obstruction or peritonitis.[1] These skills have been widely disseminated by such teaching centers as the Los Angeles Children's Hospital.

Equally important progress has been made in preoperative and postoperative care of children. The fluid requirements of infants have been found to be much smaller than previously thought;[2] and infants' intolerance of salt overload is better understood. Accordingly, maintenance fluid and electrolytes are administered in smaller quantities and replacement fluid is both multi-ionic and hypotonic in character. With the use of antibiotics and isolettes, postoperative respiratory complications have been decreased. Typical of progress in special conditions is steroid support in certain metabolic disorders such as the adrenogenital syndrome.

All these improvements increase the value of surgical intervention in certain acute diseases of childhood; but they are of no value to the patient unless the diagnosis is suspected and steps are taken to verify it. Maintaining just the right degree of informed suspicion is not easy when every vomiting newborn must be examined and innumerable telephone calls about "bellyaches" answered. How is a clinician to know the case that requires operation?

The single symptom, probably most common throughout infancy and childhood, which can portend a serious or even fatal outcome is vomiting. It is well to note that anorexia and nausea are lesser degrees of the same symptom. Many causes of vomiting are obvious, but in each phase of childhood there is a lethal lesion which may cause vomiting as a presenting symptom and the diagnosis of which can easily be missed. These lesions are: in the newborn, midgut volvulus with malrotation; in infancy, intussusception; in childhood, appendicitis.

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Midgut Volvulus with Malrotation

Vomiting is common in the neonatal period, but green vomitus is not. Vomiting is characteristic also of tracheoesophageal fistula, but in that condition there is constant salivation, and feeding causes regurgitation associated with periods of cyanosis. Atresia or stenosis elsewhere in the gastrointestinal tract is distinguished by some degree of abdominal distention in addition to the vomiting.

In midgut volvulus with malrotation, the abdomen is scaphoid and the vomiting is intermittent, but the vomitus is almost invariably green. Meconium feces may be passed. Bloody feces, associated with a decrease in hemoglobin content, signifies vascular damage. The symptoms may be indistinguishable from those of duodenal obstruction but there is an important difference between these lesions, for midgut volvulus unless treated promptly may result in fatal gangrene of the small intestine; early operation is curative.

The most important single diagnostic aid in a patient with such symptoms is roentgen study. A view of the abdomen, with the patient erect, that

shows a "double bubble" (air-fluid levels in the stomach and duodenum), with a small amount of gas beyond, is diagnostic of partial duodenal obstruction, for which early operation is indicated. An upper gastrointestinal view is not needed. Barium enema study may give confirmatory evidence of the malrotation accompanying volvulus but may easily be omitted.

Intussusception

Vomiting in an infant is a clear symptom of intussusception when associated with intermittent colicky pain, a palpable mass and "currant-jelly" stool.[3] However, there is a variant of this disease in which the vomiting (in a previously healthy infant) is accompanied by cramping abdominal pain and bloody feces; this may be mistaken for gastroenteritis, especially as the symptoms are described by telephone. In intussusception, blood in the stool indicates some degree of vascular damage. Unless this diagnosis can be ruled out, an infant with these symptoms should have a barium enema study. When the lesion is ileocolic, the typical roentgen findings are diagnostic. Ileoileal intussusception is not ruled out by negative roentgen findings. Also, it should be remembered that there are two degrees of obstruction in intussusception—the "loose" and the "tight." "Loose" intussusception may be present for several days without vascular impairment, whereas gangrene may occur within hours after onset in the "tight" variety. Present practice at the Children's Hospital is to explore when in doubt and correct the intussusception. An initiating mechanism, such as a Meckel's diverticulum or polyp, is present in ten per cent of cases and must be excised.

Hydrostatic gravimetric barium enema reduction, with careful observation, is being advocated at some centers abroad and by Ravitch of Baltimore. The results of this therapy are being carefully followed but as yet this method is not in general use. Delay in the diagnosis of this lesion results in increased morbidity and mortality when resection of damaged bowel is required.[3]

Appendicitis

Although, volumes have been written about appendicitis, it behooves physicians to review the disease as it usually appears in the child from time to time. Here, too, vomiting is usually the initial symptom, accompanied by abdominal pain. If the pain has been continuous,[4] with exacerbations but without ever subsiding completely, appendicitis should be suspected at once. Again it may be stressed that anorexia and nausea are of the same nature as vomiting and equally significant. Athough bowel habit is altered in most patients with appendicitis, and most frequently toward constipation, an appreciable number have symptoms of vomiting, abdominal pain and diarrhea indistinguishable from those of gastroenteritis.[5] The following is a case in point.

A 12-year-old girl had abdominal pain, cramping in nature, followed by vomiting and diarrhea. She was examined at two clinics and once hospitalized in the course of a week, the diagnosis of gastroenteritis being considered on both occasions.

After her admission later to the Los Angeles Children's Hospital, a roentgen film of the abdomen showed advanced meteorism with dilated loops of small and large bowel. On physical examination the pelvis was tender and indurated, the abdomen distended but silent and not tender. The patient was treated preoperatively for 12 hours with intubation, fluids and antibiotics. A perforated pelvic appendix was then removed and enterotomy performed for decompression. Recovery was fairly rapid.

The history is still the most important factor in the diagnosis of appendicitis; combined with careful physical examination, repeated frequently[6] in equivocal cases, it leads to accurate diagnosis in the great majority. Laboratory tests are of course necessary although rarely diagnostic except when pus is found in the urine. In a child with appendicitis there is almost always some degree of nausea. Nausea accompanied by persistent pain or persistent localized tenderness, with or without rigidity, should arouse suspicion of appendicitis. Fever, leukocytosis and roentgen findings are significant but vary in the degree to which they contribute to diagnosis.

Although no new diagnostic methods are available, success will increase with the completeness of the procedure outlined above.[7] If history is sketchy and does not bring out the constancy of pain, if rectal examination is omitted, if physical examination is done only once, the patient may be dismissed with a diagnosis of gastroenteritis.

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Synthetic Antimalarial Drug Therapy in Lupus Erythematosus And Polymorphous Light Eruptions

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• **The therapeutic efficacy of the synthetic antimalarial agents in lupus erythematosus and the polymorphous light eruptions is well established. Severe toxic reactions are rare but mild disturbances are relatively common. Although gold therapy probably is as effective in discoid lupus erythematosus, the antimalarials are easier to administer and cause fewer serious side effects. The mechanism of action of these drugs is poorly understood although definite anti-inflammatory properties have been noted. Perhaps further investigations of known biological processes such as free radical formation and neutralization, redox potential alterations or enzymatic changes may shed more light on this problem.**

ANTIMALARIAL DRUGS have been used in the treatment of lupus erythematosus for over sixty years.[37] However, they were not utilized to any extent in the English-speaking countries until 1951, when Page presented his dramatic results with atabrine.[36] Subsequently, the synthetic antimalarials, atabrine, chloroquine, plaquenil, and more recently camoquin, have been shown to be of great therapeutic value not only in lupus erythematosus but also in polymorphous light eruptions.

Since these drugs are readily absorbed from the gastrointestinal tract they are taken orally as a rule, although intramuscular and intravenous preparations are available. Tissue concentrations, especially in the liver, spleen, kidney and lung, greatly exceed plasma levels, probably because of the affinity of the drugs for nuclear material. Apparently the drugs are metabolized in the body and only 10 to 25 per cent of the daily dose is excreted as such in the urine. In addition, measurable amounts remain in the system up to several weeks after cessation of therapy.[2,3,6,43]

Most patients with discoid lupus erythematosus respond to adequate doses of any of the synthetic antimalarial drugs previously mentioned. Improvement usually is seen in the first four to six weeks of treatment and may be maintained and enhanced by continuing on relatively low doses. However, relapses are quite common, occurring in up to 80 per cent of patients within the first year and frequently appearing a few weeks after discontinuance of atabrine or chloroquine. The disease usually responds promptly on resumption of the same drug, although occasionally another antimalarial agent must be substituted to bring the condition under control.[11,27,38] No adequate statistics are available as yet for the relapse rate after plaquenil or camoquin therapy.

Table 1 gives comparisons of the effective doses of the synthetic antimalarials now used in lupus erythematosus. For the most part they are interchangeable, although at times a certain one will be more effective or less toxic for a specific individual. The dosage schedules vary with the patient's therapeutic response and toxic reactions. In an average course for an adult, 250 mg. of chloroquine (or the equivalent amount of one of the other antimalarials) is given twice a day for one to four weeks. The dose is then reduced to a maintenance level, usually 250 mg. a day. It should be noted that children appear to tolerate these drugs well and the dosage can be calibrated to correspond to a 70 kilogram adult. Christiansen's studies indicate that the patient should receive 25 gm. of atabrine before therapy can be considered unsuccessful. Also, he found very little additional improvement with giving more than this amount.[11] However, other workers noted that more prolonged treatment, with chloroquine at least, appreciably reduced the relapse rate.[13] It may prove to be of value to continue low dose therapy such as 250 mg. of chloroquine one to four times a week for several months after remission of the disease.

Sex, duration of the disease or character of the lesions apparently do not influence the outcome of the therapy, although the active erythematous plaques usually respond more rapidly. Oral lesions are quite resistant to treatment. There is some evidence that patients over 60 years of age are more successfully treated than younger persons.[11]

It should be emphasized that the antimalarial drugs are of value in systemic as well as discoid lupus erythematosus. Dubois[15] found that 80 per cent of patients with milder systemic changes responded to these drugs alone and that the steroid dosage could be considerably reduced when the agents were used concurrently.

The response of the polymorphous light eruptions

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TABLE 1.—*A Comparison of Average Dose Schedules for Different Synthetic Antimalarial Agents*

Drug	Usual Tablet Size	Daily Dose
Atabrine (Mepacrine, Quinicrine)	100 mg.	100 to 300 mg.
Chloroquine (Aralen, Nivaquine)	250 mg.	250 to 750 mg.
Plaquenil (WIN 1258)	200 and 400 mg.	400 to 1200 mg.
Camoquin (Amodiaquin)	200 mg.	200 to 400 mg.
Triquin (APA 5533)	*	1 to 5 tablets

*Triquin contains Aralen 65 mg., Plaquenil 50 mg., and Atabrine 25 mg.

is as dramatic as that noted with lupus erythematosus. The dosage schedules are similar although, in my experience at least, smaller amounts are needed for the light eruptions. Treatment usually must be continued throughout the summer and must be restarted the next spring.

Although the synthetic antimalarial agents are considered by most investigators to be the drugs of choice in these two diseases, Crissey and Murray found no significant difference between the results of gold and chloroquine therapy of discoid lupus erythematosus. The number of relapses was actually higher with the short term chloroquine treatment but more prolonged therapy reduced this recurrence rate.[13] The antimalarial agents do have the advantage of ease of administration and a lower incidence of disabling adverse reactions.

Although these drugs are not without some danger, severe toxic effects are quite rare. In humans, atabrine toxicity essentially is limited to the gastrointestinal tract, central nervous system, eyes, bone marrow, skin and liver. The most serious reactions include (1) liver damage, at times associated with exfoliative dermatitis, corneal edema and aplastic anemia; (2) agranulocytosis and aplastic anemia often preceded by the so-called "New Guinea lichen planus"; (3) toxic psychosis and (4) permanent blindness. The cutaneous alterations range from allergic erythema mutiforme to toxic or allergic lichenoid and exfoliative changes.[2,14,19,40] Anhidrosis due to deposition of the drug in the distal part of the sweat ducts resulted in a sweat retention syndrome in the South Pacific.[22] It should be noted that, in a long term study, Agress found less than a 0.05 per cent incidence of serious toxic reaction to atabrine.[2] Atabrine is seldom used nowadays, chiefly because of the cosmetically unacceptable yellow discoloration which occurs in most patients taking the drug for more than a week.

No skin discoloration, hepatic damage, significant bone marrow depression or hematopoietic system changes have been reported with chloroquine, although occasionally leukopenia and methemoglobinemia have been noted.[4] Mild central nervous system and visual disturbances are not uncommon; depigmentation of red and blond hair, and yellow discoloration of white hair may occur.[3,10,18] Gastrointestinal toxicity is usually mild, although hematemesis has been observed.[24] Skin reactions, both allergic and toxic, have been reported.[3,4] Although the untoward reactions to this drug almost always have been reversible, permanent atrophy of the macula was noted recently.[40]

Apparently plaquenil produces less undesirable side effects and camoquin is considered by some observers to be the least toxic of all of these agents. However, certain occular, central nervous system, gastrointestinal, hematopoietic and hepatic changes have been reported with one or both of these drugs and further observations may alter our present benign feelings toward them.[5,7,27] It is interesting but not unexpected that plaquenil, which is a hydroxychloroquine derivative, has caused hair depigmentation and that camoquin, a yellow powder, has produced skin discoloration not unlike that seen with atabrine.[7,30,45] Recently triquin, a combination of relatively small amounts of chloroquine, atabrine and plaquenil, has been tried in an effort to reduce the amount of side effects as well as to increase the efficacy of this type of therapy. It has been under investigation for too short a time for definitive evaluation.

In addition to the above-mentioned untoward effects of the synthetic antimalarials, there are certain conditions in which these drugs are contraindicated. In patients with psoriasis severe exfoliative states are induced, and in patients with porphyria acute attacks may be precipitated. It also seems reasonable that the drug should be used with caution in patients with hematopoietic or liver disturbances.

The mechanism (or mechanisms) of action of these drugs is not well understood. The various theories and approaches that have been postulated and investigated are listed below:

1. Light filtration
2. Antibody inhibition
3. Anti-inflammatory
 a. Enzymatic
 (1) Antihyaluronidase
 (2) Anticholinesterase
 (3) Oxidative phosphorylation
 (4) Antiadenotriphosphatase
 b. Adenosine inhibition
 c. Nucleoprotein binding

d. Pituitary adrenal system
e. Local effect.

Although the antimalarial agents do alter at least certain responses to ultraviolet in lupus erythematosus and the polymorphous light eruptions, the bulk of evidence at present is against the supposition that the main therapeutic effect comes from a sun-screening action.[9,44] Also, at this time there is no evidence to indicate any specific effect on antibody production or antigen-antibody reactions.

Experimental studies have shown that the synthetic antimalarial drugs produce an increased latent period and a decreased intensity of phenol induced erythemas, an acceleration of ulcer healing, a decreased inflammation and blood vessel permeability and a decided antihyaluronidase action.[8,28,42] How these anti-inflammatory effects are brought about is not clear. The antihyaluronidase activity is less pronounced in humans than in animals.[29] Binding of cholinesterase and anticholinergic-like actions have both been reported.[1,39] Neither of these properties satisfactorily explains the inhibitory effect of the drugs on inflammation.

Haydu[23] postulated that chloroquine may act by means of adenosine triphosphatase inhibition. His theory was based on the apparent increased needs of adenosine triphosphate in rheumatoid arthritis, the adenosine triphosphate-sparing action of drugs in the quinine group and the demonstration that atabrine can reversibly uncouple phosphorylation and oxidation reactions.[23,31] Recent observations by Findlay[17] indicated that quinine, atabrine and chloroquine do not affect adenosine triphosphatase. Other investigators have suggested that the antimalarial agents act by antagonizing the physiological actions of adenyl derivatives since the effects of adenosine triphosphate on heart muscle are inhibited by these drugs. This is not a specific antagonism of adenosine triphosphate or the adenyl groups.[21]

The binding of nucleoproteins by the antimalarial drugs probably accounts for the high tissue concentrations of these agents and for the inhibitory effect they have on the *in vitro* lupus erythematosus cell test. Whether this action is of importance in preventing *in vivo* changes is unknown.

More recently, the influence of the synthetic antimalarial agents on adrenal cortical steroid metabolism has received considerable attention. Nagy and Kocsár[32] found an increase in urinary 17 ketosteroids in humans taking atabrine. In contrast, Lapiere and Cauwenberge[26] noted low 17 ketosteroid excretion and high 17 hydroxycorticoid levels in the plasma and urine associated with chloroquine therapy. Also, Nagy and his co-workers found hypertrophy and evidence of increased secretory activity of the adrenal cortices of animals following prolonged atabrine intake.[33] Neither the studies of the present author and co-workers[16] nor those of Shelley and Arthur[39] substantiated these preliminary reports of increased blood and urinary 17 hydroxy or 17 ketosteroids. In addition, in an extensive investigation of chronic chloroquine toxicity in rats, Nelson and Fitzhugh[34] noted that the adrenal glands were normal except for changes due to inanition.

At present we are investigating the anti-inflammatory actions of intradermally injected antimalarials. We have been able to confirm the beneficial effects on resistant plaques of lupus erythematosus noted by Thies and others.[35,41] Our studies suggest that at least part of this action may be due to a nonspecific toxic effect.

The foregoing discussion has emphasized that the antimalarials are quite effective in suppressing the abnormal inflammatory reactions related to lupus erythematosus and polymorphous light eruptions. The mechanism of this effect is still poorly understood. Recent studies have suggested that lack of reducing substances or an excess of activated oxygen plays an important role in photosensitivity reactions.[25] In addition, the relationship of free radical formation to biological oxidation-reduction reactions, and photo-activation has received considerable attention.[12] Perhaps further investigations related to free radical neutralization or reduction of activated oxygen would shed more light on the mechanism of action of these drugs.

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ADDENDUM

Since this account was prepared, an extensive report of deposits of opaque material in the cornea of patients taking chloroquine has been published. (Hobbs, H. E., and Calnan, C. D.: Visual disturbances with antimalarial drugs, with particular reference to chloroquine keratopathy, Arch. Derm., 80: 557-563, Nov. 1959.)

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8-Methoxypsoralen

A Short Review and Comment

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• 8-Methoxypsoralen is a purified extract of the root *ammi majus lynn*, which was used in a crude form for centuries in the Middle East in the treatment of various skin diseases. In recent years it has been found that the purified extract, when taken internally, increases all skin responses to sunlight, including tanning. When too much drug is taken or when the patient is exposed to sunlight too long, the preliminary erythema may be painful, and blistering may occur. In some patients with vitiligo, islands of pigmentation appear around the hair follicles when the drug is taken, and in favorable cases these islands may coalesce to form continuous areas of pigmented skin. The drug has been found nontoxic, but successful treatment of vitiligo takes place in only a small proportion of patients.

Promiscuous use of the drug for cosmetic tanning is to be deplored. The constant irritation of the skin due to the increased action of sunlight when the drug is used may possibly increase the incidence of sun-induced skin cancers.

A topical preparation is available, which, when used with great care, may help to repigment small areas of vitiligo.

IN ANCIENT TIMES, many skin diseases were regarded as forms of leprosy. Because leukodermia is often seen in Hansen's disease, it is probable that fear of being shunned as lepers prompted sufferers from vitiligo to use oral and topical preparations of the plant *Ammi majus Linn*, which grows along the Nile. The crude preparation taken by mouth was reputed to cause many serious side effects, the most significant being liver damage. In 1947, two Egyptian biochemists, Fahmy and Abu-Shady,[4] isolated the most active principles from the plant and found them to be furocoumarins—highly photosensitizing compounds. One of these, 8-methoxypsoralen (8-MOP) is the main constituent of the extract.

Until the discovery of 8-MOP no satisfactory treatment for vitiligo existed. The new preparation was eagerly investigated and within a short time a plethora of enthusiastic papers was forthcoming. Work has been almost continuous and the purpose of this short paper is to summarize the more clinical aspects of these efforts. The comments will be my own and may not entirely agree with those of other investigators.

There is no doubt that 8-MOP in some way increases sun tanning. In the normal skin of dark persons a rich tan is produced, and with care moderate tanning will take place in the fair skinned and even in redheads. In vitiligo, as is well known, pigment production upon use of this drug commences in follicular islands (Figure 1), and in favorable cases these islands coalesce to form unbroken areas of pigment. Unfortunately, the treatment is tedious and often frustrating. While in some patients new pigment formation becomes obvious in as short a time as two weeks, in most cases several weeks and even months of therapy is necessary before repigmentation commences. Moreover, in many patients follicular islands may appear but never join with one another; some persons may completely repigment in certain areas and not produce any new melanin in others; and finally, even

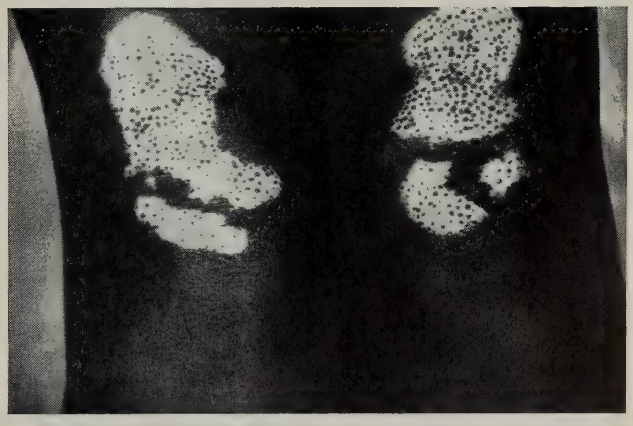


Figure 1.—Good follicular response about the knees to 8-MOP.

in successful cases the new pigmentation may fade after treatment is stopped. In a recent paper Levai[5] commented on the sites in which treatment is more likely to be successful. Taking complete repigmentation as the only criterion (for obviously partial follicular repigmentation is cosmetically as undesirable as vitiligo) the treatment has been effective in

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perhaps 30 per cent of cases in which I have used it. Even this relatively small success is an advance.

In an effort to save the unfortunate majority of patients expense and inconvenience by attempting to forecast success or failure at the first interview, certain criteria may be noted. Speaking generally, the older the vitiligo the worse the prognosis. Many patients will show follicular islands of melanin at the first examination, and these are presumably of favorable significance. A theory that is deserving of more attention is that put forward by Pegum.[7] He noted that the work of Billingham and Medawar[2] established that in man and certain animals two distinct melanocyte systems exist, one in the basal layer and one in the hair apparatus. These are anatomically distinct because the melanocytes of the basal layer surround the neck of the hair follicle but do not run down to the hair bulb, where another group of melanocytes is found. Physiologically, they are demonstrably distinct because one may find dark hairs in white skin in man, and red hairs in black skin in guinea pigs; and using cell suspensions and a microcannular technique, black melanocytes can be introduced into red or white hair follicles and result in the growth of black hairs. Billingham and Medawar removed areas of skin in Thiersch-graft thickness from guinea pigs, thus removing the melanocytes in the basal layer, and found that skin would regenerate entirely from the intact hair bulbs, with the pigment cells derived from the hair follicles also.

Using this work as a guide, Pegum attempted to treat vitiligo by removing epidermis in several ways. He took a Thiersch-graft thickness in two patients, blistered other vitiligo areas with carbon dioxide snow, and with cantharidin, and in other ways attempted to get rid of the inactive basal melanocytes. In several of these experiments, repigmentation from the hair follicles resulted. Correlating this work with the reports of follicular repigmentation taking place with 8-MOP therapy, he suggested that in an area of vitiligo where the hairs are pigmented a good result with 8-MOP may be anticipated. Conversely, if the hairs are white and depigmented (Figure 2) the prognosis is poor.

Much has been written regarding the possible toxic effects of psoralen. Transient changes in liver profile studies have been reported but in some of these there were no pretreatment studies.[3] In the others the abnormalities have quickly reversed following termination of treatment. Two cases of jaundice proved to be of viral origin. There have been four reports of development of light sensitivity in previously normal persons.[9] Five patients noted muscular incoordination which disappeared when they no longer took the drug.[10] No report of serious



Figure 2.—Vitiligo of eyelid showing depigmented lashes. There was no response to treatment with 8-MOP.

toxicity has yet been forthcoming in a collection of literature which must surely cover many hundreds of cases.

Tucker[11] recently thoroughly evaluated this aspect of psoralen therapy in an excellent review. No drug has been more maligned than 8-MOP on this score and none more thoroughly investigated and exonerated. To my mind, the danger in 8-MOP therapy consists in the hazards associated with sunburning. Even when the skin is tanned, any intensive period of sun exposure after taking the drug produces erythema beneath the tan, and a sensation of burning. Although it has been suggested that 8-MOP could be used to produce a protective tan in patients prone to form basal cell carcinomas, it has been my feeling that it will potentiate the formation of skin cancer—as it does all the other effects of sunlight. Thus, it is interesting to note that Stegmaier[8] reported the case of a 36-year-old male with no previous history of skin cancer who spent two weeks in the Colorado mountains while taking 8-MOP and who developed a basal cell carcinoma of the skin two months later.

It was originally assumed that the tanning action of the psoralens (see Figures 3 and 4) was due to increased melanogenesis and that the resultant heavy pigmentation afforded the sun-protection. A problem was to explain the protection claimed by some albino patients. Here we felt that the shielding must have been due to increased thickening of the skin, as suggested by European workers, notably Miescher.[6] This theory was not satisfactorily demonstrated until recently, when Becker[1] and later Zimmerman[12] produced experimental thickening of the skin following the ingestion of 8-MOP and ultraviolet irradiation. This thickening seems to be due partly to the formation of a stratum lucidum and partly to a lessening of shedding of the stratum corneum due to an increased cohesion of squamous cells. Melanin granules accumulate in the thickened

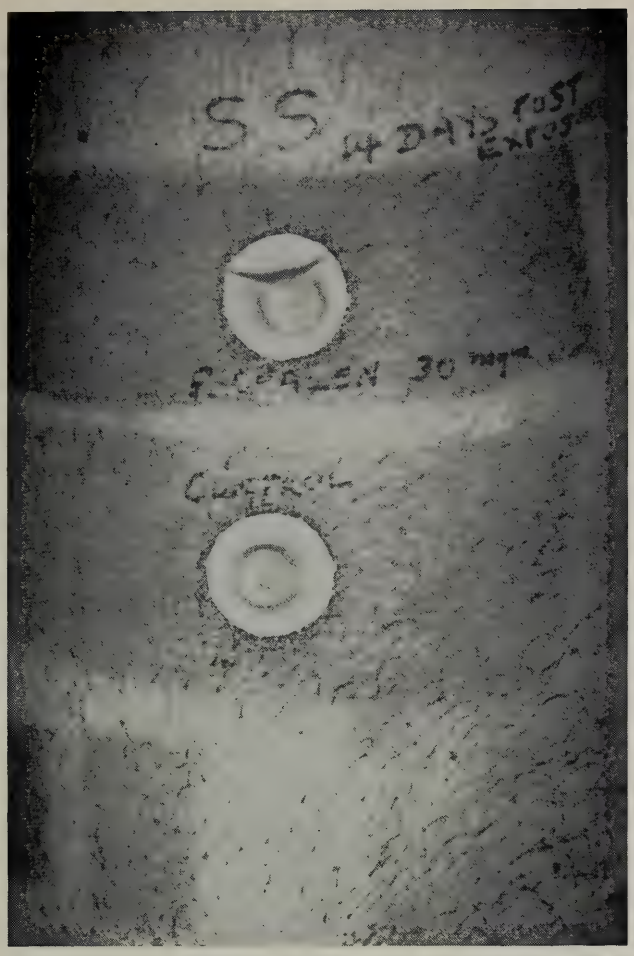


Figure 3.—Increased tanning following single one-hour exposure to sunlight after administration of 30 mg. of psoralen. Lower rectangle is control site.

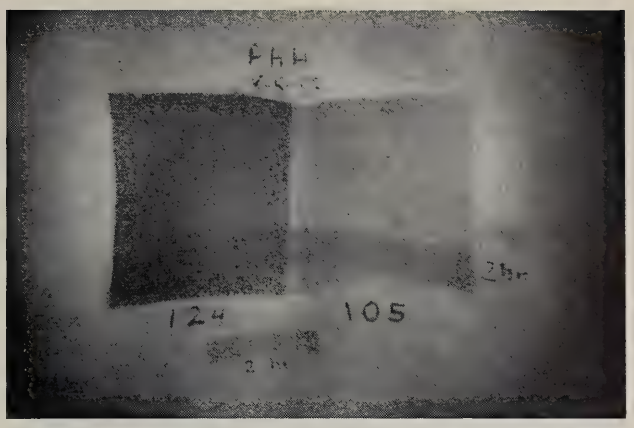


Figure 4.—Remarkable tanning effect of 8-MOP is demonstrated by this experiment in which the squares 124 and 105 were separately exposed to sunlight on alternate days. Square 124 was exposed following ingestion of 8-MOP, and 105 was control square.

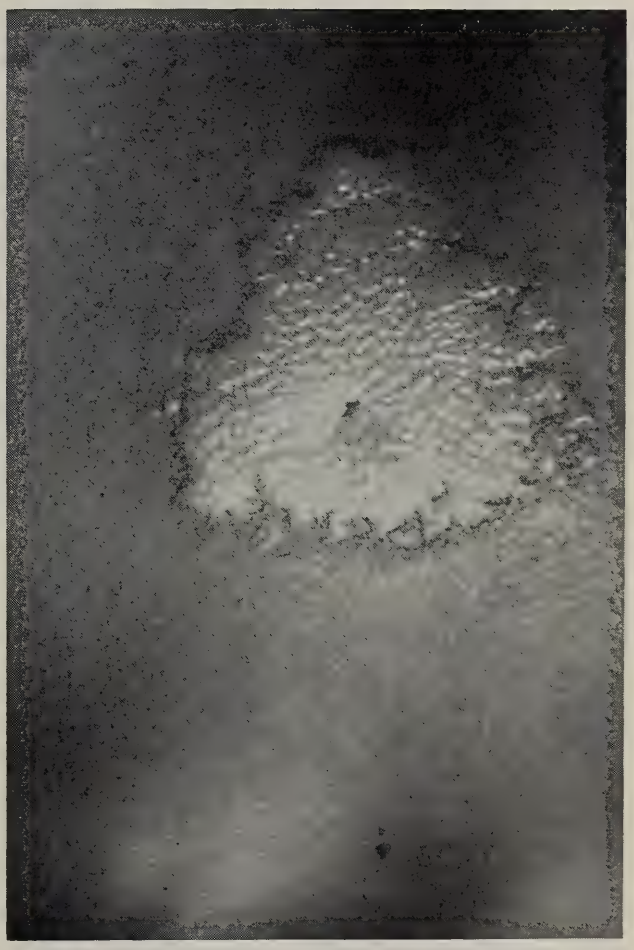


Figure 5.—Blistering following topical application of 8-MOP and excessive sun exposure.

stratum corneum and thus it darkens. A coincidental specific effect on melanogenesis has not been ruled out.

When treating a patient with vitiligo the problems associated with 8-MOP should be emphasized. The patient should be warned both as to length of treatment and the limited chances of success. It is my practice to stress that at first the vitiligo will be more obvious and indeed other patches of vitiligo may become apparent as the normal skin acquires the characteristic tan. The historical hazards of the treatment should be discussed, and a bromsulphthalein liver test should be carried out before treatment and periodically during therapy. The treatment should be commenced early in the summer to allow maximum time for repigmentation to occur. I have found that even in Southern California the sunlight is not strong enough to produce a good result in winter (even in the absence of smog) and that artificial ultraviolet light is not a good substitute for natural sunlight.

Finally, the patient is given thorough instruction regarding taking the drug. Twenty milligrams is the standard dose and should be exceeded rarely. Nausea, flatulence, burning in the throat and water brash are not uncommon and may sometimes be avoided by taking the capsules with a cookie and some milk. Sun exposure should be cautious and increased gradually; and in order to avoid medico-legal com-

plications detailed precautions regarding graduated sunbathing time are written on each prescription.

The topical preparation is potent and difficult to remove completely. Sloppy attempts at removal may wash some of the preparation onto surrounding skin and produce extensive burning after the next sun exposure (Figure 5). However, it may be used with caution on small areas of vitiligo.

Many physicians are afraid of using 8-MOP. In this regard it may be pointed out that there are many widely used drugs with dangerous potentialities. Penicillin is a good example. We do not forbid cigarettes because they may produce a carcinoma of the bronchus. Should we then condemn the psoralens because they may one day potentiate a relatively harmless skin cancer? The furocoumarins are abundant in many fruits and vegetables. An average celery stalk may contain over 1 milligram of psoralens. Used with understanding, 8-MOP has a place in the practice of dermatology.

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CORRECTION—3,178 gm., not 2,178

A TYPOGRAPHICAL ERROR that changed the purport of the sentence in which it appeared was made in the article "Pulmonary Hyaline Membrane Disease—The Obstetrician's Point of View," by Edward B. Cantor, M.D., which appeared in the January, 1960, issue of this journal.

On page 8, column 2, line 22 the weight of the infant was printed as 2,178 gm. It should have been 3,178 gm.

Synthetic Oxytocin

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• **A synthetic oxytocin, Syntocinon®, was used in 3,342 obstetrical patients for a wide variety of indications. It was concluded that the preparation is as effective as natural oxytocin.[1] There were no side effects observed, particularly vasospasm or anaphylactic reaction. Its use in clinical obstetrics can be recommended provided there is a proper indication for its use and the need for close supervision and individual adjustment of dosage is recognized.**

THE UNIQUE VALUE of posterior pituitary extracts in obstetrical practice lies in their ability to stimulate physiological, effective uterine contractions. Because the oxytocic principle contained in these preparations is an extremely potent drug, they have been both admired and feared. The very potency which affords numerous uses of oxytocin in normal and abnormal obstetrical situations is capable, if injudiciously employed, of producing serious and even fatal accidents.

In recent years, however, better preparations of oxytocin, better methods of administration and better appreciation of proper safety precautions, have combined to enhance the value of these drugs and to increase their range of usefulness.

Recently, as a result of several investigations, oxytocin has been synthesized. In 1953, the chemical structure of oxytocin was elucidated almost simultaneously by DuVigneaud and associates in the United States and Tuppy in Austria. In the following year, DuVigneaud was able to synthesize oxytocin and, in 1955, Boissonnas evolved a method of manufacturing synthetic oxytocin on a commercial scale.[2] Now synthetic oxytocin—manufactured by the Sandoz Company under the trade name Syntocinon®—is available for clinical use.

Extensive clinical testing indicates that synthetic oxytocin is a valuable drug.[3,4,8,9] Not only does it produce oxytocic effects identical to purified posterior pituitary extract, but also it possesses the following desirable features: (1) uniform potency, (2) freedom from animal protein, and (3) freedom from vasopressor substances capable of producing alterations in blood pressure or coronary artery circulation.[10,13,14,15]

PRESENT STUDY

In order to test its clinical usefulness, synthetic oxytocin was administered to 3,342 patients at the Los Angeles County General Hospital for a wide range of indications and employing the following dosage schedules:

1. Intramuscularly to stimulate labor: One-half unit (1/20 cc.) repeated as necessary at 20-minute intervals.

2. Intramuscularly before the delivery of the placenta: 10 units (or 1 cc.).

3. Intravenously with the birth of the anterior shoulder: 10 units undiluted.

4. Intravenous infusion to control postpartum hemorrhage or uterine atony: 30 or 40 units in 1,000 cc. of 5 per cent dextrose in water.

5. Intravenous infusion to stimulate labor: 5 units in 500 cc. of dextrose in water or, if the uterus appeared to be particularly irritable, 3 units in 500 cc. of 5 per cent dextrose in water.

When Syntocinon® was administered by intravenous infusion during labor, a physician or experienced nurse was present at all times to observe the strength and frequency of uterine contractions. When the observer was a nurse, the physician remained in the hospital and close at hand. This is essential because both the optimal and safe rates of administration are variable and depend entirely on the initial and continued response of the individual patient. Ordinarily, the rate of infusion was started at 8 to 10 drops a minute and varied according to the subsequent uterine response. The range of variation was between 6 and 60 drops a minute. As labor progressed, the rate of flow was altered, as necessary, to maintain uterine contractions at three- to five-minute intervals. Rarely was the infusion discontinued during labor, unless contractions became quite strong. If there was any element of uterine inertia, infusion was continued through delivery into the postpartum period in order to avoid uterine atony. Initial strong, prolonged uterine contractions which suggested tetany made it necessary to discontinue infusion in three instances. Subsequently, one patient went into spontaneous labor, and the

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infusion was restarted in the other two patients without further complications.

When Syntocinon® was given by intravenous infusion, the following contraindications were observed: Previous uterine scar; transverse or compound presentation; definite cephalopelvic disproportion; abnormal fetal heart tones, grand multiparity (over para-five) (unless complications of pregnancy demanded induction, for example, diabetes or toxemia).

Judging from recent reports, the exact indications for oxytocin are a controversial matter.[7,11] There are those who find a wide range of clinical application and others who would limit its use. We wished to test a broad range of indications, listed as follows:

1. Elective induction of labor.
2. Indicated or therapeutic induction of labor.
3. Elective acceleration of labor.
4. Indicated or therapeutic acceleration of labor.
5. Acceleration of the delivery of the placenta.
6. Prophylaxis and treatment of uterine atony.
7. Completion of inevitable abortion, incomplete abortion and hydatidiform mole.

RESULTS

Elective induction of labor: A number of reports recommend oxytocin by intravenous infusion for the elective induction of labor.[6,16] It has been said that when cases are properly selected, the procedure is better than 97 per cent effective, with or without artificial rupture of the membranes.[5] Providing that the membranes have not been ruptured, there has been no adverse effect on either the mother or the fetus. In this series, induction of labor was elected in 108 cases utilizing the following criteria:

(a) The patient was at term as judged by menstrual history and fetal development.

(b) The uterus was irritable.

(c) The presenting part filled the pelvis and fitted against the lower uterine segment.

(d) The cervical os was either anterior or in the axis of the vagina.

(e) There was evidence of cervical softening with beginning dilatation and effacement.

The membranes had been ruptured before the start of the intravenous infusion in 70 cases and unruptured in 28 cases. There seem to be two advantages in starting the infusion before amniotomy. First, the subsequent amniotomy is easier; and, second, observed dilatation and effacement of the cervix makes one more certain the pregnancy is at term. If the cervix does not change in a reasonable period, the infusion may be discontinued without jeopardy to mother or child. Observing the above technique, the rate of flow was increased or decreased in order to maintain the proper pattern of uterine contractions. Of the 108 patients, 106 were delivered during the initial infusion. One of the two remaining patients was delivered during the second course of intravenous oxytocin, and the other 12 hours after the second course was completed. There were no adverse effects noted either on the mother or the infant.

Indicated or therapeutic induction of labor. Induction of labor may be indicated for a variety of reasons. Among those often given are toxemia of pregnancy, diabetes, previous severe erythroblastosis, postmaturity and intrauterine fetal death. To this list might be added ruptured membranes with delayed onset of labor, particularly if amnionitis is feared. Thirty-seven patients falling in this category were given an intravenous infusion with the following results:

1. Ruptured membranes with delayed onset of labor (18 cases). All the patients were within four weeks of term. In every instance, the delivery was successful and infants were born in good condition. The average length of labor was 3 hours and 59 minutes.

2. Toxemia of pregnancy (13 cases). Eleven patients were within four weeks of term and two were within the thirty-ninth week of pregnancy. In each case, it was possible to rupture the membranes before initiation of the intravenous infusion. All infants were delivered vaginally and 11 survived. One 5 pound 2 ounce infant died of the effects of atelectasis and one 6 pound 11 ounce infant died of unknown cause during the course of labor.

3. Diabetes (three cases). The three patients were multigravida and were between the thirty-sixth and thirty-eighth week of pregnancy. In each case a normal living infant was delivered vaginally after rupture of membranes and intravenous infusion of oxytocin.

4. Abruptio-placenta (two cases). In both cases the abruption was severe and no fetal heart tone could be heard before the initiation of intravenous infusion. Vaginal delivery was successful in both cases. One patient required 6 gm. of fibrinogen because of a fibrinogen deficiency manifested by poor clot formation.

5. Marginal placenta previa with delayed onset of labor (one case). The patient entered the hospital near the term of her fifth pregnancy because of painless vaginal bleeding. A diagnosis of marginal placenta previa was made by vaginal examination and the membranes were ruptured. When the patient did not go into labor after six hours of observation, intravenous infusion of oxytocin was begun and vaginal delivery of the living surviving infant occurred two hours later. Blood loss during labor was not excessive and the lower uterine segment remained intact.

Elective acceleration of labor. While oxytocins are unnecessary and not indicated during the course of normal labor, they can be used to accelerate the prodromal stages of labor or labor slowed by too early sedation, and in selected cases of false labor which fit the criteria for elective induction. Fifty-four patients are included in this category:

1. False labor (15 patients). The patients had been admitted to the hospital in false labor. Uterine contractions ceased shortly after admission. Since they were at term by dates and physical examination and since the condition of the cervix was favorable, intravenous administration of oxytocin was initiated. In all cases, effective labor began almost immediately and vaginal delivery ensued. All infants were normal.

2. Prodromal labor (28 patients). The patients were judged to be in the prodromal stages of labor, having been observed for periods ranging from two to twelve hours. Oxytocin was given intravenously to shorten the prodromal stage and in all cases a normal pattern of labor was established, followed by vaginal delivery of a normal infant.

3. Sedation in early labor (11 patients). Uterine contractions were either decidedly slowed or apparently stopped. In all cases, intravenous infusion of oxytocin was effective in reestablishing a normal pattern of uterine contractions, followed by vaginal delivery of a normal infant.

Indicated or therapeutic acceleration of labor. Uterine inertia is usually classified as being either hypotonic or hypertonic.[12] Hypotonic inertia is characterized by weak and ineffective uterine contractions occurring either primarily or secondarily after a period of normal labor. Oxytocins, preferably given intravenously, are clearly indicated for hypotonic inertia. Sixteen patients with primary hypotonic uterine inertia were treated by intravenous administration of Syntocinon.® Fourteen normal infants were successfully delivered vaginally after a normal pattern of uterine contractions was reestablished. Two living infants were delivered by cesarean section when it became evident that there was also an element of cephalopelvic disproportion. Seven patients with secondary inertia were stimulated with intravenous Syntocinon,® four after a period of rest. Six infants were delivered vaginally. Five were normal and one was still-born, having died from the effects of amnionitis. One infant delivered by cesarean section because of cephalopelvic disproportion died in the neonatal period of the effects of amnionitis.

A diagnosis of hypertonic uterine inertia is made in patients having abnormal or incoordinate uterine action, often with the lack of a proper polarity, contractions being strong but ineffective. Sometimes a diagnosis is made of colicky uterus, cervical dystocia or constriction ring dystocia. In this series we were unable to identify any case of abnormal uterine action. Some authorities feel that if the diagnosis can be made, oxytocin is contraindicated because it exaggerates the abnormal action.

Acceleration of the delivery of the placenta. 2,800 patients were given 10 units of Syntocinon® intramuscularly following the delivery of the baby and 0.2 mg. of Methergine® intramuscularly following the delivery of the placenta. In 96 per cent of the cases, the placenta separated within an average of three to seven minutes and was then delivered by simple expression. Estimated blood loss was less than 500 cc. in all but 1.5 per cent of the patients. For the remainder the blood loss was estimated to be between 500 and 800 cc. and two patients were thought to have lost at least 1,000 cc. However, no patient with an estimated blood loss of 500 cc. or more had evidence of shock or excessive postpartum anemia. None required a postpartum transfusion.

Manual removal of the placenta was done in 4 per cent of the cases. In half of these cases the procedure was necessary because of retained placenta. In most instances, the placenta had failed to separate within a reasonable time (which was, on the average, 20 minutes). In the remaining cases of manual removal it was done either in connection with a difficult operative delivery, for inspection of the uterine cavity or because the uterus remained atonic following intramuscular administration of Syntocinon.® The incidence of uterine atony following intramuscular use was 0.7 per cent. In a few cases manual removal was done for the purpose of removing placental fragments not delivered at the time of simple expression. Subsequent curettage for postpartum bleeding was necessary for 0.2 per cent of the patients. At the time of curettage no placental fragments were found.

Forty-one patients were given 10 units of undiluted Syntocinon® intravenously with the delivery of the anterior shoulder of the baby. In all cases, the placenta delivered promptly and blood loss was minimal, ranging between 50 and 100 cc. There were no untoward reactions.

Uterine atony. In addition to Syntocinon® intramuscularly at the time of delivery, 90 patients received Syntocinon® by continuous intravenous drip for the purpose of preventing or controlling uterine atony. Sixty-two patients had actual uterine atony, and in the remaining 28 cases atony was feared because of prolonged labor, over-distention of the uterus, uterine fibroids, etc. Either 30 or 40 units of Syntocinon® were added to 1,000 cc. of 5 per cent dextrose in water. Without exception, intravenous drip maintained a good uterine tone and controlled further vaginal hemorrhage. In no case

was a transfusion needed because of subsequent loss of blood. It was felt that for this purpose intravenous Syntocinon® was far superior to a uterine pack.

Abortion and mole. In two hundred cases, Syntocinon® was used either by continuous intravenous infusion or divided doses of 10 units intramuscularly every hour for three or four doses for the purpose of evacuating the products of conception in cases of inevitable abortion, incomplete abortion or hydatidiform mole. No statistical analysis is offered, but it was concluded that Syntocinon® was at least as effective as natural oxytocin for this purpose.

SIDE EFFECTS

Since synthetic oxytocin contains no vasopressor substances, it should have no effect on the blood pressure. No changes of blood pressure were noted during the course of intravenous infusion when it was checked at ten-minute intervals. Neither was there a rise in blood pressure after intramuscular administration when the blood pressure was checked at a 20-minute interval and at a 60-minute interval. The only patients in whom hypertension was noted were those with clear-cut evidence of toxemia of pregnancy or permanent hypertension.

There was no synergistic action between Syntocinon® and anesthetic agents employed. While the usual anesthetic agent was either ether, given by open drop, or spinal, 23 patients were delivered under cyclopropane without untoward effects. If Syntocinon® is free of vasopressor, then there should be no contraindication to its use with cyclopropane. There were no anaphylactic or other untoward reactions.[1,9]

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Syntocinon® was supplied by Sandoz Pharmaceuticals.

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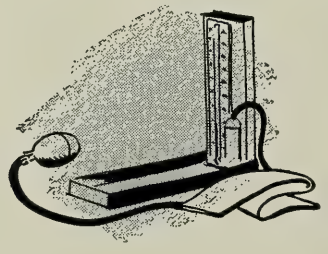
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Common Granulomatous Inflammations of The Extremities

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• **Granulomatous inflammatory diseases of the extremities caused by inanimate agents (physical or chemical) and agents of unknown character are frequently unrecognized. The symptoms produced by these lesions are too frequently ascribed to trauma, particularly an insignificant bruise or imagined microtrauma. None of the rheumatic diseases—tenosynovitis, myositis, bursitis, fibrositis, gout, rheumatoid arthritis and osteoarthritis—has ever been created by slight or severe mechanical trauma in experimental animals or human beings.**

THE EFFECT of significant actual trauma on the extremities is not obscure or difficult to diagnose. The fundamentals of treatment are universally recognized by physicians and are fairly well comprehended by patients.

One example of significant trauma should suffice to illustrate this: Suppose a closed dorsal dislocation of the wrist occurs. It would be obvious to the patient and the doctor. Suppose, however, that an x-ray film reveals not only the dislocation but a fracture of the lower end of the radius and ulna, which was not obvious to the patient and was not known to the physician before the x-ray; and as usual, all the connecting ligaments are ruptured or torn off the bones, and the extensor tendons are stripped up and the flexor tendons, nerves and blood vessels are stretched taut across the lower end of the ulna—none of which is directly visible to the patient, or the physician by physical inspection. Here, then, is visible and invisible severe significant trauma.

Following the complete reduction of the dislocation as soon as possible to prevent complications of gangrene or permanent nerve injury, what is the expected course of tissue repair in such a case? It progresses steadily toward healing with absorption of hemorrhage and edema, healing of the torn ligaments and fractures, and restoration of the smooth gliding surfaces of the tendons and sheaths, which were so severely traumatized.

After an injury such as this there may be some permanent restriction of wrist motion due to ordinary scar tissue in the ligaments of the wrist, but such a severe injury does not result in the development of ganglion, chronic villous tenosynovitis, bursitis, or calcific densities in the bursae, or stenosing tenosynovitis, or the carpal tunnel syndrome, or chronic traumatic myositis, or rheumatoid arthritis, or osteoarthritis.

The development of these diseases has often been reported as owing to a tear in the ligament of the wrist, bruises, bumps, occupational activity, repetitive motions, use of small hand tools, occupational microtrauma, overstretching of the muscles, exposure to cold—many other extrinsic things.

In this particular example a complication may occur, occasionally seen after a Colles fracture also—and that is that after about six weeks there may be a sudden rupture of the extensor pollicis longus tendon in its osseofibrous tunnel. The pathological process involved in this complication is ischemic necrosis of the tendon, due to prolonged edema in its narrow compartment. Microscopic examination of the ruptured ends of the tendon in such cases does not reveal any evidence of granulomatous inflammation—only simple tendon necrosis. This complication is not due to one of the chronic tendon or tendon sheath diseases caused by granulomatous inflammation. However, spontaneous rupture of a tendon without significant trauma is always due to one of the granulomatous inflammations.

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THE DOGMA OF TRAUMA

Let us weigh the dogma of trauma as a cause of several common entities against the facts of granulomatous inflammation involving the extremities.

A ganglion is often the first manifestation of degenerative disease of the ligaments of the wrist, hand, ankle or foot. It usually makes a gradual appearance and pain is noticed if the area is struck; most frequently it is not noticed until some occurrence brings it to the attention of the patient. It cannot be produced by lacerating the carpal ligament, as in the wrist dislocation just described, or by surgical incision through the ligament. As a matter of fact, cure of it is effected by complete excision of the degenerated area of the carpal ligament, together with the ganglion. Here, then, significant trauma (surgical) cures a condition presumed to be caused by trauma, a paradox. Recurrence of the ganglion in the same place is due to lack of complete excision

of the degenerated portion of the carpal ligament causing the ganglion.

Taking into consideration the four moving extremities of each normal person, and the use and abuse they take in sports or work, the proportion of persons who have this disease is almost infinitesimal considering these four parts which are exposed daily to so-called microtrauma. Why perform surgical operation, a maximal trauma, if minimal trauma can cause this condition? Before surgical procedures were perfected for this condition, it was common practice to pound the ganglion with a book to rupture it.

A collection of fluid in a tendon sheath is not a ganglion. Following significant trauma, either hemorrhage or a serous effusion may occur. This condition runs a normal course of absorption, which may be aided by aspiration with a needle; it does not recur at intervals and does not become chronic. Where an effusion in the tendon sheath does persist, or recur, then the diagnosis that it was of traumatic origin becomes suspect. The pathological reason for chronic tenosynovitis with effusion is that it is one of the granulomatous inflammations, currently classified as one of the rheumatic diseases. Crepitating, or villous tenosynovitis, with or without "rice bodies" (not due to tuberculosis or to any known animate agent) is due to one of the inanimate (chemical or physical) agents, the more common ones being cholesterol, uric acid or rheumatoid factor, singly or in mixed lesions.

A granulomatous inflammation now thought to be produced by collagen (inanimate agent) is Dupuytren's contracture of the palmar or plantar fascia (also Peyroni's disease, and probably torticollis).

Dupuytren, a French surgeon, described this condition first in 1831. It affects less than 2 per cent of the adult population, and occurs chiefly in men. It is seldom seen in Negroes or in Indians. Most persons who have it are unaware of the early manifestations of this disease unless they experience an acute inflammatory attack in one or more nodules of the fascia, accompanied by tenderness and redness of the overlying skin.

Following the injury of a hand or wrist requiring a few weeks of bandaging or being in a plaster cast, the patient may suddenly discover the condition and honestly believe he never had it before because he has been unable to appreciate that it had begun insidiously several years previously. In such cases it usually can be found, in one stage or another, in the uninjured hand. It is most often bilateral and may be more advanced in one hand than the other. The major hand is not always involved to a greater extent than the opposite.[4]

Gout is a systemic disease due to an inborn inability to excrete uric acid normally. A common misconception of manifestations of gout is that it only occurs in the great toe, or that tophi can only be found in the ears. This granulomatous inflammation caused by uric acid (inanimate agent) can manifest itself in any joint and in any bursa or synovial space (as well as many other parts and organs of the body). In those afflicted with tophaceous gout, uric acid deposits are found in one or multiple locations, commonly subchondral areas adjacent to the collateral ligaments of joints, and in bursal and synovial spaces. Such a deposit in one of these areas may form a weeping sinus through the skin, which is seen most frequently in the digits but sometimes in the skin over the olecranon bursa. Gouty periarthritis may be confused with other forms of arthritis.

If an acute inflammatory episode occurs, which responds to adequate dosage of colchicine, it is certainly very likely acute gout; if the patient does not remember, or does not wish to remember, any previous attacks, it may be the first attack. Occasionally gout is associated with the granulomatous inflammation of rheumatoid arthritis, the cause of which is unknown, but recently has been associated with the rheumatoid factor (inanimate agent).

Direct significant trauma to a subcutaneous bursa usually ruptures the bursa lining and the sac fills with blood. This resolves with, or without aspiration in a short period of time and does not recur or become chronic. It can occur again after another trauma, but a new hemorrhage cannot occur spontaneously without bursting of a blood vessel. An acutely swollen bursa with warm red skin overlying it is most frequently caused by the granulomatous inflammation of uric acid, cholesterol or both, and is not due to "think back" trauma, or "must have bumped it" trauma. In bursitis of this type, microscopic studies of the lining of the bursa prove the diagnosis. Specific therapeutic treatment causes the inflammatory reaction to rapidly subside. Opacities seen in x-ray films of these areas often also are reversible by systemic medication.

Adventitious bursae can be caused by specific repeated occupational trauma (as in hod-carrying, hardwood floor laying) but these bursae do not develop granulomatous inflammations from such trauma.

This question has always been helpful when making a diagnosis: What would you, as a physician, expect would happen following a certain describable trauma; and, drawing on your experience in many similar cases, what has been the effect of this type of trauma on the part so injured?

It is doubtful if any physician would subscribe to a statement that a blow that fractured ribs over the heart could cause rheumatic endocarditis. However, there are many who will subscribe to a statement that a severe blow, or even a minor one, in the region

of a joint can cause the development of some chronic condition, whatever it may be—bursitis, epicondylitis, tenosynovitis, gouty periarthritis, rheumatoid or degenerative arthritis.

Barritt[1] said that a physician should render a medical opinion based on *reasonable medical probabilities.* (Be it noted he did not say *possibilities.*)

It takes more mental energy to think about the role of the reticuloendothelial cells, and their proliferative reaction which displaces normal cells in tissues in granulomatous inflammatory disease, than to accept common offhand epithets such as "wear-and-tear" or "microtrauma" in the etiologic description of these conditions. Forbus[3] suggested that a further understanding of the granulomatous inflammatory reaction may lead to a solution of the cause of genuine neoplasia.

There are a number of other conditions which have been blamed on trauma, among them xanthoma of tendons, which is caused by a hypercholesteremic familial metabolic disorder; spontaneous rupture of tendons in their osseofibrous tunnels from rheumatoid arthritis; peripheral median nerve neuritis due to rheumatoid, or other types of tenosynovitis of the flexor tendons in the carpal tunnel; trigger finger; DeQuervain's disease; nonosteogenic fibroma of bone; and Heberden's nodes.

Granulomatous inflammation can be produced by many agents, but not by trauma—by animate agents such as bacteria and coccidia; or by silica, fats and oils, collagen, cholesterol, uric acid, rheumatoid factor, Bence-Jones protein; or by unknown agents, as in Hodgkin's disease, rheumatic fever, mycosis fungoides, and sarcoid of Boeck.[3]

Some of the more common types of disease affecting the extremities during the years of employment are fibrositis, myositis, bursitis and so-called epicondylitis, which only affect a small proportion of the 11 million Americans afflicted with arthritis and related rheumatic diseases. Some of these conditions run a course independent of treatment, and some of the effects of the disease are reversible without treatment. Most of them have a tendency to recur at more or less frequent intervals, or to be chronic. None of the rheumatic diseases or granulomatous inflammations presented here as examples have ever been created by slight or severe mechanical trauma either in experimental animals or in human beings.

These diseases are associated with dysfunction of the reticuloendothelial system, and trauma does not produce a persistent stimulative effect on the cells of the reticuloendothelial system. The course of the granulomatous inflammations is toward chronicity and recurrence. These lesions may be reversible, may end in scarring, or may cause total progressive dissolution of tissue or total destruction of the individual.

The problem lies not so much in a lack of pathological reasoning and understanding as in specious socio-economic reasoning—almost as if when a patient says something is so, his physician must say it is so in order to keep out of an argument that may affect his economic status and thus avoid conflict with the patient, a labor union or the patient's employer. It is granted the impact of such reasoning was greater during the earlier part of the past 50 years of the age of industry, for in those days there was limited insurance coverage, particularly for off-the-job occurrences. Now, with most industrial employees covered by an umbrella of insurance both on and off duty, fewer and fewer young physicians will be exposed to this unsound concept, and it is now more likely that the physician will be remunerated for services that once would not have been paid for if the condition were certified as not being industrially connected from the standpoint of scientific fact and probability.

When a patient who attributes a disease of the extremities to on-the-job trauma is found, upon physical examination, to have one of the granulomatous diseases dealt with herein, rather than a "compensable" injury, the physician can do the patient a worthwhile service by making an accurate diagnosis and informing him of the real nature of his illness.

As Thannhauser said, "every patient is a new experience and a challenge to the keenness of our senses."[5]

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Femoral Shaft Fractures

A Study of Closed Reduction and Open Treatment

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• **A comparative study was made of 58 cases of closed femoral shaft fractures treated by skeletal traction, and 24 cases of closed femoral shaft fractures treated by open reduction with internal fixation.**

Although complications occurred in some cases, intramedullary nailing appeared to be the most satisfactory method, resulting in primary union, in decreased time of recumbency and time in hospital, in earlier ambulation and in less residual disability.

Success of intramedullary nailing depends largely upon adequate training or experience of the surgeon in the technical operative aspects of the procedure and in postoperative management.

Placing supplemental autogenous iliac bone chips at the fracture site in closed femoral fractures in which intramedullary nailing is performed appears to enhance callus formation and bony consolidation.

Skeletal traction should be utilized on all patients whose general physical condition does not permit operative intervention.

FEMORAL SHAFT FRACTURES are severe disabling injuries that demand critical evaluation as to the method of treatment. Two generally accepted methods are being utilized in this country at present, namely, skeletal traction-suspension, and open reduction with internal fixation, especially by means of intramedullary nails. Brav and Jeffress,[1] Cave[2] and Street[7,8] have reported uniformly good results with intramedullary nailing and they hold that a more anatomical reduction, earlier ambulation, decreased hospitalization time and less residual disability are distinct advantages over other methods. McKeever[3] found that other methods did not offer particular advantages over treatment by traction-suspension, although intramedullary nailing was not included in his series.

The basis of the present report is a review of 80 patients who had closed femoral shaft fractures, some of whom were treated by skeletal traction-suspension, and the remainder by open reduction with internal fixation.

Method of Study

The 80 patients in the series were treated on the orthopedic surgical service of the Veterans Administration Hospital in Los Angeles in the period 1946-1958. In two cases the fractures were bilateral. Three patients had open reduction with internal fixation performed at other hospitals before they were transferred to the VA hospital for postoperative management. The remaining 77 patients received all their treatment here.

Adequate follow-up study was available on 66 femoral fractures. The period of observation varied from eight months to seven and a half years, averaging slightly over two years.

Only closed fractures were considered in this study, inasmuch as open fractures presented problems of wound contamination with more likelihood of infection, thus making them candidates for primary treatment by skeletal traction only, which is the policy at this hospital. No fractures resulting from disease of the bone were included in this study.

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Skeletal Traction-Suspension

Fifty-eight fractures in 56 patients were treated by traction-suspension. Skeletal traction was accomplished by the insertion of a Steinmann pin or Kirschner wire through the proximal tibia or supracondylar area. A Thomas splint and Pearson attachment were utilized for balanced suspension. Traction weight was varied according to the progress of fracture alignment, as determined by periodic roentgenograms. Traction was continued until the fracture site was thought to be clinically stable, the time varying from nine weeks to 36 weeks, averaging approximately 13 weeks. Immobilization was further continued in a plaster spica for an additional nine weeks to 30 weeks, depending upon roentgenographic evidence of solid callus formation or actual bony union.

Complications and results in the group treated by traction-suspension. There were eight instances of delayed or nonunion after 16 to 42 weeks of traction-suspension and immobilization. Eight fractures could not be reduced satisfactorily after three to five weeks of traction and attempted manipulation. One patient refractured the femur 20 weeks after the initial injury. These 17 complications required open reduc-



Figure 1.—*A*, high subtrochanteric fracture; *B*, nonunion after seven months of skeletal traction; *C*, eight days after blade-plate fixation and bone graft; *D*, fracture of blade-plate fixation 17 weeks after operation; *E*, solid union 14 months after intermedullary nailing and bone graft.

tion with internal fixation and bone grafting. Intramedullary nails were used in 13, blade-plate fixation in two, transfixion screws in one and plating in one.

Pin-tract infection occurred in one case, and in another severe pyodermia after prolonged immobilization in a spica cast. Conservative treatment sufficed.

Bilateral renal calculi developed in two patients, who were referred to the urological service for definitive care. Severe pyelonephritis developed in two cases and pneumonia in one. All responded satisfactorily to antibiotics.

Twenty-eight fractures healed by primary union. In 17 patients solid union was obtained after secondary open reduction and internal fixation and bone grafting. One patient in this group fractured the blade-plate fixation 16 weeks postoperatively, and subsequent intramedullary nailing and bone grafting was done, bony union eventually being obtained (Figure 1).

Knee motion was normal in 28 cases. Full extension was lacking in eight, and four patients could not flex the knee to 90 degrees. There were eight patients who could neither fully extend the knee nor flex it to 90 degrees.

Twenty-seven patients had measurable femoral shortening, 22 of them so much that shoe correction was required to prevent limping.

Twenty-eight patients were returned to full activity and had no complaint or apparent residual disability. Nineteen patients had to modify their physical activity due to residual knee difficulty or quadriceps weakness.

Primary Open Reduction and Internal Fixation

Twenty-four patients were treated by primary open reduction and internal fixation. This was done electively within four to sixteen days after the fracture had occurred.

The preoperative care consisted of (1) correction of traumatic shock and depleted blood volume by administration of whole blood and intravenous fluids; (2) skin or skeletal traction to maintain femoral length and provide comfort for the patient; (3) evaluation of other injuries if existent, and appropriate therapy as indicated.

Intramedullary nailing. Primary intramedullary nailing was performed in 19 cases. The clover-leaf nail was used in 17; in the other two, done early in the series, a large Steinmann pin and V-shaped nail were used. The nails were inserted retrograde and driven distally in the manner described by Smith[4,5] and Street.[7,8] Roentgenograms were usually made to determine the location of the distal end of the nail, and alignment at the fracture site. Additional screws or circumferential wires were used as fixation for large fragments in comminuted fractures. In three recent cases, autogenous iliac bone chips were packed around the fracture site.

Postoperative management consisted of administration of antibiotics, elevation of the affected extremity, and balanced suspension for from eight to thirty days. Knee motion was encouraged on the first or second postoperative day. Ambulation was permitted, with partial weight bearing, in an average of four weeks following the nailing procedure. In eight cases, after there was definite evidence of bony union, the nail was removed at varying intervals of seven to 15 months postoperatively. This was done either as an elective procedure or because of pain due to nail protrusion above the trochanter.

Blade-plate or plate fixation. Four patients with high femoral shaft fractures had blade-plate fixation. A lateral approach was used, the fracture was reduced and fixation was obtained by either a Smith Peterson nail and Thornton plate, or by a Neufeld nail.

One patient with a fracture in the lower third of the femur was treated by plate fixation.

Postoperative care included bed rest or immobilization for eight to 30 weeks.

Complications and results of the group treated by



Figure 2.—*A*, fracture in the lower one-third of the femur; *B*, fracture fragments distracted four months after primary plating; *C*, fracture of the plate and nonunion nine months after plating; *D*, a year and a half after secondary dual plating and bone graft; *E*, three and a half years after secondary dual plating and bone graft.

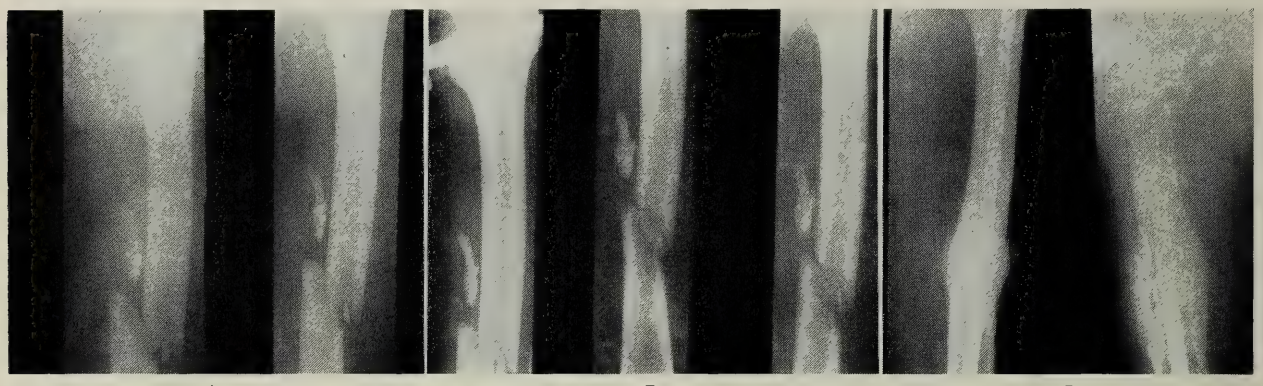


Figure 3.—*A*, comminuted mid-shaft femoral fracture; *B*, showing delayed union and distraction of the fracture fragments over a 13-week period of skeletal traction; *C*, solid union 14 months after intramedullary nailing and bone graft.

primary open reduction with internal fixation. Two patients had bending of the nail, one at three weeks and the other five months postoperatively. Correction was done by manual reduction in the manner described by Soto-Hall and McCloy,[6] although in one case the nail fractured after bony union had occurred, necessitating extraction of the proximal portion later. In one case thrombophlebitis developed and was satisfactorily dealt with by anticoagulant therapy. Migration of the nail proximally occurred in one patient, necessitating reinsertion. One patient, who had been treated elsewhere, had penetration (not migration) of the nail into the knee joint. The nail was extracted after bony union was obtained. Superficial wound infection which then developed, abated under conservative treatment. Two instances of bronchopneumonia and one of pyelonephritis occurred. Treatment with antibiotics sufficed.

Two complications developed in the five patients treated by blade-plate or plate fixation. Osteomyelitis occurred in one case in which blade-plate fixation was used. The disease was quiescent for a five-month observation after removal of the metallic fixation, bone union having been obtained. In the one case in which plating was used, the plate was fractured nine months postoperatively and nonunion developed necessitating open reduction with internal fixation by dual plating and bone grafting.

Primary union was obtained in 15 cases in which intramedullary nails were used. Knee motion was normal in 14, but in one the patient could not fully extend the knee. Femoral shortening occurred in three patients, but only one of them required a shoe correction. Twelve patients were returned to full activity or were able to participate in active sporting events. Three patients had to limit their physical activity because of quadriceps weakness.

None of the group treated by blade-plate fixation had restriction of knee motion or femoral shortening, and all were returned to full activity.

In the case in which the plate used for fixation fractured, bony union was obtained after subsequent open reduction, dual plating and bone grafting, but knee motion was decidedly restricted, quadriceps strength was reduced and femoral shortening required shoe correction. The patient's physical activity was greatly restricted (Figure 2).

DISCUSSION AND COMMENT

Several factors in the statistical data in Table 1 are worthy of separate comment.

1. The period of recumbency in the group treated

Table 1.—*Data on 80 Patients with Femoral Shaft Fracture Treated Either by Closed Reduction or by Open Reduction and Nailing or Plate Fixation*

	Skeletal Traction	Intramedullary Nailing	Blade-Plate or Plating Fixation
No. of patients	56	19	5
No. of fractures	58	19	5
Age (range in years)	21-76	17-78	37-66
Average age (years)	39	38	55
Location of fracture:			
Middle one-third	40	14	0
Upper one-third	14	3	4
Lower one-third	4	2	1
Type of fracture:			
Transverse, oblique or spiral	38	11	2
Comminuted	20	8	3
Time in bed or immobilization:			
Range (weeks)	4.5-48	1.5-7.5	9-25.7
Average (weeks)	25	4	13
Time in hospital:			
Range (weeks)	4-103	4-45	14-49
Average (weeks)	26.3	12.3	29
Complications:			
Orthopedic	19	6	2
Medical or other	5	3	0
Mortality	0	0	0
Results*			
Primary bony union	28	15	3
Bony union after secondary open reduction, internal fixation and bone graft	17	0	1
Knee motion:			
Normal	28	14	3
Lack of 180 degrees of extension	8	1	0
Lack of 90 degrees of flexion	4	0	0
Lack of both 180-90 degrees of motion	8	0	1
Femoral shortening:			
None	22	12	3
1 inch or less	19	3	1
More than 1 inch	8	0	0
Disposition at last follow-up visit:			
Full activity	28	12	3
Restricted activity	19	3	1
Insufficient follow-up period	11	4	1

*12 patients were lost to adequate follow-up study and 4 patients are still under clinical observation. These 16 patients are not included in evaluation of results.

by intramedullary nailing was less than one-sixth that of the group treated by skeletal traction, and less than one-third that of the group treated by blade-plate or plate fixation.

2. The period of hospitalization of the group treated by intramedullary nailing was less than half that required by the other two groups.

3. Primary bony union was obtained in 15 of 19 patients treated by intramedullary nailing, and in three of five treated by blade-plate fixation. In the traction-suspension group of 56 patients, 28 obtained primary union.

4. The residual disability of the group treated by intramedullary nailing and blade-plate fixation was far less than that of the group treated by skeletal traction or by plating.

Delayed union or nonunion was a complication in eight patients treated by traction-suspension. Winant[10] reported a similar occurrence in 68 cases reviewed, although the majority of fractures in that group were open. The reasons for delayed or nonunion in the present series are not clearly understood, although a review of the roentgenograms made during the period of traction revealed distraction or separation of the fracture fragments in five instances (Figure 3).

The multitude of technical operative difficulties have been described by many other investigators and it is not within the scope of this report to repeat them. However, there are certain factors which appear to influence the success or failure of intramedullary nailing.

1. *Experience and training of the surgeon.* This should be obvious. The selection of patients, knowledge of the many instruments and their proper application; the technical operative difficulties which can arise and the postoperative management are

problems which can best be dealt with by surgeons who have had adequate training and experience in operative treatment of damage to bones, particularly femoral shaft fractures.

2. *Selection of the proper length and width of the nail.* The right length can be determined before operation by making scanograms on the unaffected femur or by direct measurement from the lateral femoral condyle to the top of the trochanter, depending upon the ease with which the trochanter can be palpated. As to the width of the nail, it should be the same size as the reamer, if one is used; and in unusually wide femoral canals, two Kuntscher nails can be utilized by stacking one inside the other and driving them distally.

3. *Selection of patients.* Intramedullary nailing should always be done as an elective procedure—should be used only if and when the general physical condition of the patient has been satisfactorily stabilized.

4. *Selection of fractures.* Fractures in the midshaft, in the upper one-third and in the upper portion of the lower one-third are amenable to intramedullary nailing.

The addition of autogenous iliac bone chips around the fracture site, as recommended by Brav and Jeffress[1] and Thomson,[9] appears to enhance earlier callus formation and bony consolidation.

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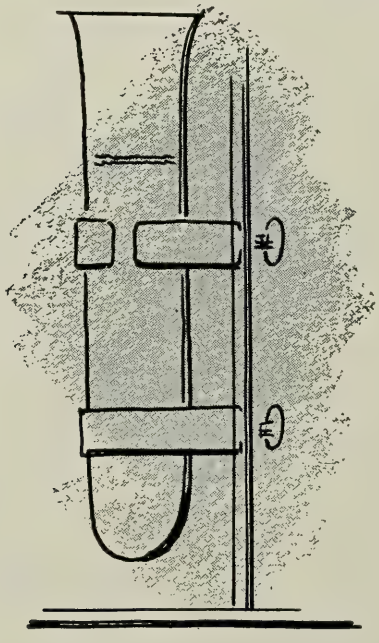
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Intranasal Injection of Corticosteroids

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• **Intranasal injections into the inferior turbinates of a slightly soluble form of prednisolone TBA (Hydeltra® TBA) into persons with complaint of nasal obstruction gave considerable relief in 78 per cent of cases. Nasal hyperfunction due to seasonal allergic rhinitis, vasomotor rhinitis and secondary nasal edema from sinusitis was the indication for use. No local or general reactions other than a small amount of bleeding at the time of injection was noted. This method allows full utilization of the anti-inflammatory activity of corticosteroids at the local tissue level without producing a systemic effect.**

A DECADE has passed since recognition was first given to changes in the mucosa of the upper air passages under stimulation of the pituitary adrenocorticotropin hormones and the adrenal corticosteroids.[5,18] Following reports of Bordley and his co-workers,[2,3,4] many authors indicated relief of symptoms of allergic diseases with administration of these hormones parenterally and orally.[9,10,17] The severest forms of nasal allergic reaction and bronchial asthma often subsided completely. Swelling of affected nasal mucous membranes subsided, a more normal pink color returned and the thick gelatinous mucus characteristic of allergic reaction disappeared. The nasal turbinates became smaller and the air space became larger. Nasal polyps lost their translucence, began to shrink and in many instances disappeared.

Later topical use of corticosteroids by nasal sprays was reported to avert many systemic side effects. An early report in 1951 by Dill and Bolstead[6] indicated that cortisone nasal spray produced a more or less temporary effect. Objectively, the use of the solution lessened nasal secretions and decreased edema of the nasal mucosa. They noted too, that many patients had relief of mild asthmatic symptoms such as wheezing, cough and tightness of the chest. Also headache of allergic origin was relieved and polyps shrank. They noted no untoward effects and no atrophy of nasal mucosa. Subsequently, in 1952 Dill and Bolstead[7] stated that only half their patients had some relief of allergic symptoms from cortisone sprays and only while using the spray.

Williams[20] in 1952 observed that results of giving cortisone by mouth for reduction of nasal polyposis were disappointing. Other medical and surgical measures gave more lasting results, he believed.

Semenov[13] described injections of cortisone directly into nasal polyps. One patient a minute or two after the injection had weakness, dyspnea, substernal pressure, flush of the entire face, wheezing, rapid, weak pulse and collapse. All these symptoms disappeared within an hour. In a later discussion[8] Semenov said that hydrocortisone is twice as potent and more effective topically than cortisone. He stated he had injected 5 mg. of Cortone® acetate into the nasal mucosa hundreds of times without mishap, whereas a dose of 25 mg. evoked severe reactions in three patients.

In 1952 a very favorable report was issued by Wall and Shure[19] after intranasal injection of cortisone in 52 patients with unmistakable allergic rhinitis; 42 had pronounced improvement. In all cases of acute allergic rhinitis, results were excellent, they said. They also reported two severe, immediate, unexplainable constitutional reactions which left no after-effects. At the conclusion of their report they advocated the intranasal injection of cortisone into the inferior turbinates for prolonged symptomatic relief of allergic rhinitis, especially of the acute seasonal variety.

Multiple studies using cortisone as packs and drops in allergic rhinitis followed. Evans[8] in 1954 recommended continuous and more widespread use of these methods by the medical profession.

Grace, in discussing Evans' paper, stated he had used cortisone topically "without any startling results." However, he said that injections of cortisone into the nasal mucosa gave "splendid" results. The dosage he used was 2.5 mg. in a series of four injections and no bad reactions occurred.

In 1954 Smith[16] used hydrocortisone in a nasal jelly in allergic rhinitis, together with specific hyposensitization. He reported topical therapy more effective than submucosal injection into the nasal turbinates in relieving symptoms.

In 1955, Sidi and Tardif[14] reported on intranasal injections of hydrocortisone acetate (compound F) into the anterior third of the inferior turbinates of the nose for treatment of allergic rhinitis. They noted favorable results in 30 of 50 cases. Two of the 50 patients complained of a sensation of thoracic constriction after the injection followed by pain in the lumbar region. This reaction did not last more

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than four minutes. The dosage these investigators used was never more than 6 mg. of hydrocortisone acetate at one time.

All patients with allergic rhinitis treated by Anderson and Ogden[1] were helped by nasal sprays of prednisolone. These investigators said that pharmaceutically prednisolone is considered several times more potent than hydrocortisone.

In 1958 Myers[11] reported on the treatment of allergic nasal polyps by intrapolyp injection of prednisolone TBA.* He noted no untoward reactions and said that results were excellent.

Doses of about 30 to 40 mg. were employed at each treatment.

MECHANISM OF ACTION

Several properties of the corticosteroids may explain why they are effective in nasal disease. The human organism attempts to maintain homeostasis through the pituitary-adrenal axis hormonal secretions. Allergic reaction may well be due to inability of the organism to either produce sufficient, effective cortical hormones or inability of specific shock organs to utilize them. Why many patients respond poorly to stress—whether due to allergy, infection or emotions—may be explained on the basis of inadequate function of the pituitary-adrenal axis.

Nasal inflammation and hyperfunction is produced in susceptible persons by any stress whether due to allergy, infection or emotions. Edema is primary in this inflammation and believed located in the gel of connective tissue. The enzyme hyaluronidase present in connective tissue is liberated. In inflammation the enzyme liquefies the gel with resultant edema. Hyaluronidase also disrupts the integrity of the capillary endothelial cell, increasing capillary permeability and enhancing edema. The corticoids are believed to neutralize hyaluronidase, hence controlling the inflammatory edema. A good deal of evidence that large doses of the corticoids lower resistance to infection but small doses increase resistance,[12,15] has accumulated. Acute infectious rhinitis appears to improve with small doses of corticoids.

In other words, these hormones help keep a good peripheral vascular bed, improve smooth muscle tone, maintain a healthy capillary endothelium and preserve the ground substance of connective tissue. Since corticosteroids are effective in all inflammatory disorders, steroid injections need not be confined to allergic nasal disease. In many cases, it is impossible to make specific delineation between nasal allergic disease and infectious rhinitis or nasal changes from emotions or weather changes. Finding eosinophils in the nasal smear is not pathognomonic of nasal allergic disease. Wolfe[21] showed that eosinophilia locally and in the peripheral blood occurs with nasal hyperfunction associated with emotional stress. He also observed that polymorphonuclear leukocytes occurred with the eosinophils in emotional stress with no apparent allergic reaction or infection. Wolfe demonstrated that the nose reacts similarly in any disease that affects that organ—namely, with hyperemia, nasal obstruction, turbinal and mucosa swelling and increased secretions. Sneezing may occur. This reaction represents a defense to shut off from the organism what is harmful or unpleasant whether it is a viral, bacterial, pollen or a disagreeable emotional reaction. Color changes of the nasal mucosa from pale violet to scarlet may give a clue as to whether allergic disease or infection predominates. But, here again specificity is absent.

The effectiveness of the pituitary-adrenal axis theoretically determines the extent of the reaction and the speed to which normal conditions return. Seemingly, local injection of the corticosteroids, especially in a transitory episode, should hasten return to normal function of the nose. In addition, increased concentration of the hormone in the tissues may act as protection against assault by pollen, bacteria or emotional stress.

INDICATIONS

The indication for the use of intranasal prednisolone is primarily the relief of nasal obstruction caused by edema of the inferior turbinates. Vasomotor rhinitis is a generic term reserved for this condition. Edema may occur in seasonal allergic rhinitis, in infection as in bacterial rhinitis secondary to infectious sinusitis, and in emotional reactions as described by Wolfe.[21] Acute nasal edema as in coryza lasts but a few days and is self-limited. Intranasal injections of prednisolone are recommended for longstanding and recurrent nasal edema recalcitrant to other therapy. No contraindications exist.

PRESENT STUDY

The basis of this report is the use of a series of three nasal turbinate injections of corticosteroids in the treatment of 419 patients with vasomotor rhinitis of various causes. There were no side reactions of importance. Some psychological anxiety existed with the mention of a needle. When the patient realized that the procedure is painless no further apprehension was apparent. A slight amount of cocaine solution may be sprayed on the anterior ends of the inferior turbinates before injection. A small amount of bleeding occurs at the time of each injection, especially if considerable congestion exists. The bleeding ceases within a few minutes. Although clinically

*In the form of suspension Hydeltra® TBA—Produced by Sharp & Dohme, Division of Merck & Co.

successful results were obtained with cortisone and hydrocortisone, my impression was that Hydeltra® TBA* (prednisolone) was so much more effective that the use of the other corticosteroids was soon discontinued. Hydeltra® TBA, a very slightly soluble ester of prednisolone, is capable of producing a longer and more pronounced local anti-inflammatory effect when injected than does hydrocortisone or cortisone. The manufacturers state that, since Hydeltra® TBA is so very slightly soluble, 18 to 24 hours may elapse following injection before there is a change in its chemical structure with subsequent absorption in local tissues and effective relief of symptoms. My experience agrees with that claim.

Initially, 0.2 cc. (8.0 mg.) was injected into each anterior end of the inferior turbinate as superficially as possible. This was repeated usually in three to four days, and again about a week after the second injection. The patients usually had relief for varying periods up to a year or more. If the patient returned with a recurrence of symptoms, larger doses appeared necessary at the second series to give the same relief—0.3 cc. (12 mg.) Hydeltra® TBA for each turbinate at each treatment.

During the year 1958 questionnaires were mailed to 419 individuals who had received a series of three injections for various nasal complaints, the last injection more than one year previous. Of this number, 195 returned the questionnaire. Reporting only their own subjective observation, 152 (78 per cent) stated that they had had considerable relief of their nasal complaints for at least six months, 67 (44 per cent) saying they had had no return of their symptoms for at least one year. Many had had complete relief since the time of therapy for as long as three years.

Of the 419 persons who received the series of three injections, 298 (71 per cent) had typical histories of seasonal allergic rhinitis. Vasomotor rhinitis was the diagnosis in 109 patients (26 per cent) who complained of perennial nasal obstruction. The cause was uncertain but the majority admitted being tense and anxious. Allergic sensitivity is difficult to prove in this group. Sinusitis resulting in secondary nasal edema was confirmed in 12 patients (3 per cent).

A diagnosis of allergic seasonal rhinitis had been made in 110 (72 per cent) of 152 patients who stated in the questionnaires that they had had relief of symptoms. The remaining 42 (28 per cent) had long-standing vasomotor rhinitis of uncertain cause.

Several days following an injection, the nasal mucosa, whether pale blue or violet from allergic reaction or bright red or pink from infection, returns to a normal pink color. A noticeable subsidence of edema becomes evident, with pronounced decrease of secretions. At the end of the third injection, oftentimes, the turbinal bodies appeared fibrous. Cardinal relief noted by the patients was ease in breathing and lack of a feeling of obstruction. Many also commented on the disappearance of postnasal drip and regaining a sense of smell. Sometimes one injection of prednisolone relieved the symptoms when the obstruction had been present for a number of days to several weeks. The symptoms did not recur.

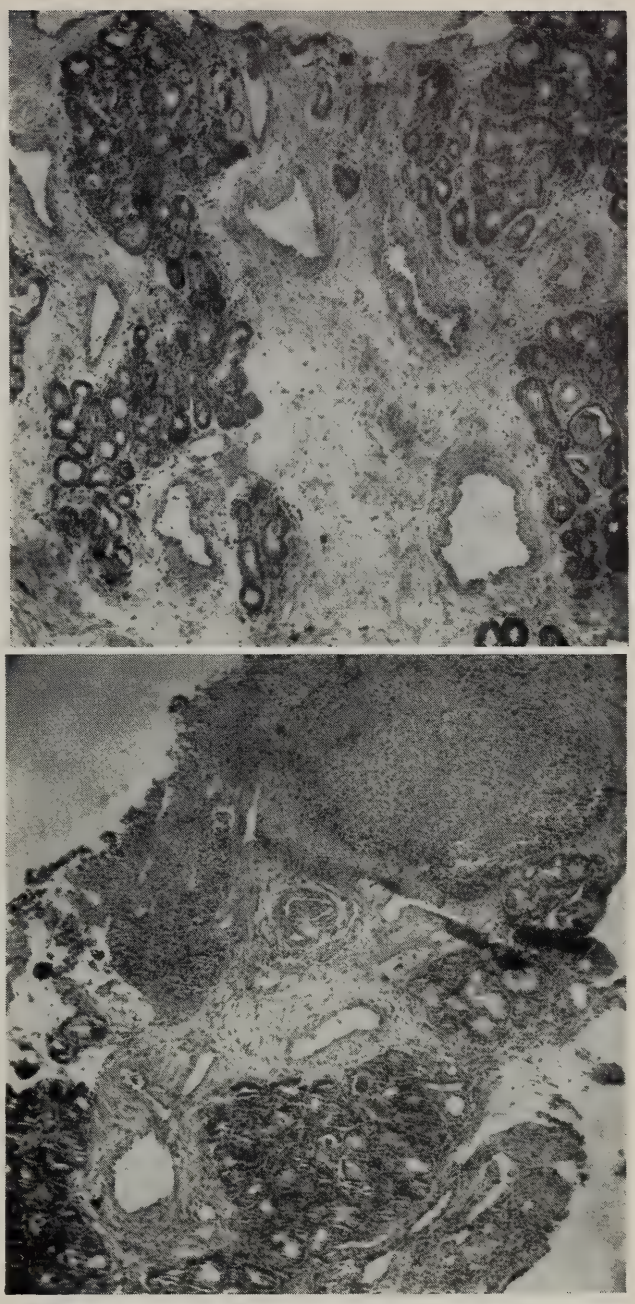


Figure 1.—*Above:* Section of inferior turbinate of individual complaining of nasal obstruction. Note marked edema, engorged blood spaces and increased thickness of the connective tissue layer. *Below:* Section of same inferior turbinate one month later following three injections of prednisolone. Edema has subsided, the blood spaces are smaller and the connective tissue layer is reduced considerably. (×100)

*Supplied by Sharp & Dohme, Division of Merck & Co.

In biopsy of tissue taken from the inferior nasal turbinates in some cases, no pronounced microscopic changes were noted aside from decrease in edema of the tissue. The amount of connective tissue present was neither greater nor less than normal, nor was there any evidence of the injected material within the tissues. (See Figure 1.)

Direct injection of Hydeltra® TBA into polyps was disappointing. Some shrinkage was noted but never complete disappearance. Surgical removal of large polyps was always necessary. I believe that prednisolone injections offer an expediency in relieving transitory nasal hyperfunction regardless of the etiologic factor, whether allergic sensitivity, infection or emotional disturbance. They are also a help sometimes in chronic nasal disease if irreversible changes have not already taken place.

Time-tested methods of pollen desensitization and surgical operation on the nasal septum and on polyps are still in order when indicated. Sinus disease may be a result of nasal dysfunction or complicated by it. The principles of drainage and ventilation may require very conservative sinus operations, but seldom are such procedures indicated. Hydeltra® TBA intranasal injections will promote drainage and ventilation of the sinuses by decreasing nasal edema.

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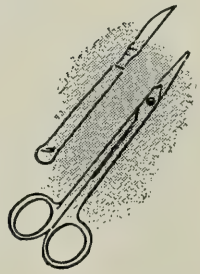
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Cardiac Arrest

Successful Resuscitation in the Hospital Outside the Operating Rooms

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• **It is believed that if physicians generally can bring themselves to carry out the drastic action necessary, the benefits of cardiac massage for patients with reflex inhibition of heartbeat can be extended to most cases of this kind occurring anywhere in a hospital, even though there is not time to summon a surgeon or anesthesiologist.**

This concept requires that attending physicians be prepared to recognize and treat cardiac arrest in salvageable patients. To carry out massage of the heart, a short incision must be made beneath the left breast to permit grasping the heart and starting it again. Mouth-to-mouth breathing until a mask and oxygen arrive is a necessary part of the procedure.

Whether to attempt massage must be a decision entirely up to the physician on his appraisal of the circumstances; but the procedure is probably not advisable outside a hospital.

THIS ARTICLE is written to encourage physicians generally to prepare themselves intellectually, emotionally and technically to perform cardiac massage in the hospital whenever necessary to revive a salvageable patient. In the past[1,21,23,24] only surgeons and anesthesiologists were particularly concerned with this problem.

Recent hospital surveys[25] indicate that reflex inhibition of the heartbeat with cardiac arrest occurs as frequently outside the operating rooms as within. Hence, unless the physician in attendance at the time is able then and there to initiate cardiac massage himself, it is unlikely that it can be done soon enough. Summoning someone probably would take too much time. Even physicians who have performed the procedure in the operating room where everything is available to accomplish it know that it is difficult to act quickly enough, especially with one's first experience with this disaster. Even Lahey,[12] who has had considerable experience with cardiac arrest, wrote of how difficult it is for the surgeon and others participating in the procedure to function without panic and loss of time.

Although it would seem almost impossible for a physician not used to doing surgical operations to suddenly take over the role, that very thing has been done, as verified by several of the successful resuscitations recorded in this paper (Table 1). The first case, reported by Bloomfield and Mannick,[4] was that of a 41-year-old truck driver who was brought to the hospital by ambulance in shock with precordial and arm pain. Electrocardiograms showed evidence of anterior myocardial infarction. While receiving supportive measures the patient suddenly became unconscious and cyanotic without pulse or blood pressure. Pounding on his chest and needling the heart brought no response, whereupon the chest was opened by the resident internist through a 10 cm. incision beneath the left breast and massage was begun. A minute later the patient became semiconscious and asked, "What's going on?" He was asked to cooperate, which he did, saying, "Okay, Doc, anything you say." Although he required anesthesia and a long period of massage and supportive measures and finally defibrillation, he did make a satisfactory recovery and was discharged from the hospital fully ambulatory.

Perhaps initiation of massage will not be possible for many physicians at present, but progress in this direction is being made and should be encouraged. Medical schools are now including instruction in the principles and practice of cardiac resuscitation. Interns and residents in general practice and the specialties are being given instruction in this important emergency procedure. Several postgraduate courses[3] are providing training and experience with animals, which, it should be said, is the best way to learn how to proceed. Therefore, the time is not far off when physicians generally will be prepared to initiate massage when cardiac arrest occurs in the hospital, just as they now do tracheotomy when immediate action is required. Although this trend should be fostered, the final decision for or against instituting cardiac massage must be that of the attending physician and must depend upon his judgment at the time. Any pressure either legal or otherwise would result in more harm than good.

Causes of Cardiac Arrest

The primary cause of cardiac arrest elsewhere than in operating rooms appears to be a reflex inhibition of the heartbeat. The exact mechanism is poorly understood. Vagal stimulation produces bra-

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dycardia, the end point of which may be arrest, the so-called vaso-vagal reflex.[5,20,27] The contributing causes of anoxia—increased carbon dioxide, alteration of the pH of the blood[15] and the introduction of a toxic substance into the blood—may or may not be present. Panic or great fear may be a part of the mechanism. Many of the patients in whom arrest occurs outside the operating rooms are healthy persons undergoing diagnostic studies. This makes recognition and treatment even more important.

The accompanying disease or indication for hospital admission in patients successfully resuscitated is indicated in Table 1. Some of the patients were undergoing roentgenologic studies of the bronchial tree and other x-ray diagnostic procedures; others had been admitted to the emergency ward with asthma or following accidents, especially with thoracic injuries; and there were also obstetrical patients, newborn babies, patients undergoing urologic, neurologic or cardiovascular studies, and patients with cardiac disease and minor coronary occlusions. Table 1 also shows where in the hospital the cardiac

TABLE 1.—*Data on 19 Cases of Successful Cardiac Resuscitation Outside the Operating Room (Collected from the Literature)*

Author	Location	Diagnosis	Age of Patient	Physician Initiating Massage	Defibrillation	Mouth to Mouth Breathing	Duration of Massage	Adjunctive Therapy and Result
Southworth, et al.[22]	X-ray Dept.	Heart disease	25	Surgeon	Electric shock, 7	No	45 min.	Respirator; good
Turk and Glenn[25]	Patient's room	Mitral stenosis	37					Good
	Patient's room	Mitral stenosis	48					Good
	Constant temp. room	Causalgia	55					Good
Beck, et al.[2]	Hallway	Myocardial infarction	65	Surgeon	Electric shock, 5	No	25 min.	Cedilanid intravenously; oxygen; good
Celio[8]	Patient's room	Myocardial infarction	46	Surgeon			30 min.	Thorazine; good
Mozen, et al.[16]	Patient's room	Heart disease	51	Resident (surgeon)	Electric shock, 1	Yes 15 min.	27 min.	Tracheotomy; vasopressor drugs; good
Reagan, et al.[17]	Emergency room	Coronary occlusion probable	55	Surgeon	Electric shock, 3	No	18 min.	Coronary regimen; good
Brown, et al.[6]	X-ray Dept.	Not known. Vaso-vagal reflex?	24	Surgeon	Drugs only	No	2.5 hr.	O_2 intermittent, 7 days, blood, digitalis; good
Galos and Surks[9]	Delivery room	Ruptured uterus	Newborn	Obstetrician	No	No	12 min.	Thorazine, 7 days; good
Bloomfield and Mannick[4]	Emergency room	Myocardial infarction	41	Resident (medical)	Electric shock, 1	No	45 min.	Oxygen; good
	Emergency room	Myocardial infarction	50	Resident (surgeon)	Electric shock		2 hr. (intermittent)	Left sided hemiparesis
Kent[11]	X-ray Dept.	Bronchogram doubtful	32	Surgeon	Adrenalin	No	?	Hypothermia; good
McBurney[13]	Delivery room	Unknown	20	Obstetrician	Procaine	No	25 min.	Good
Schwartz and Lobell[19]	Patient's room	Rheumatic fever	54	Resident (surgeon)	Electric shock	Yes 10 min.	20 min.	Norepinephrine, 15 hrs.; pulmonary edema, 3 days P.O.; good
Williams and Spencer[26]	Emergency room	Bronchial asthma	9	Surgeon		No	5 min.	Hypothermia; good
	Emergency room	Knife wound, chest	38	Surgeon		No	5 min.	Hypothermia; good
	Emergency room	Stab wound, chest	39	Surgeon		No	5 min.	Hypothermia; good
McGregor and Newton[14]	Ward	Myocardial infarction	51	Internist	Electric shock, 2	No	29 min. 2 min.	Intravenous procanamide; good

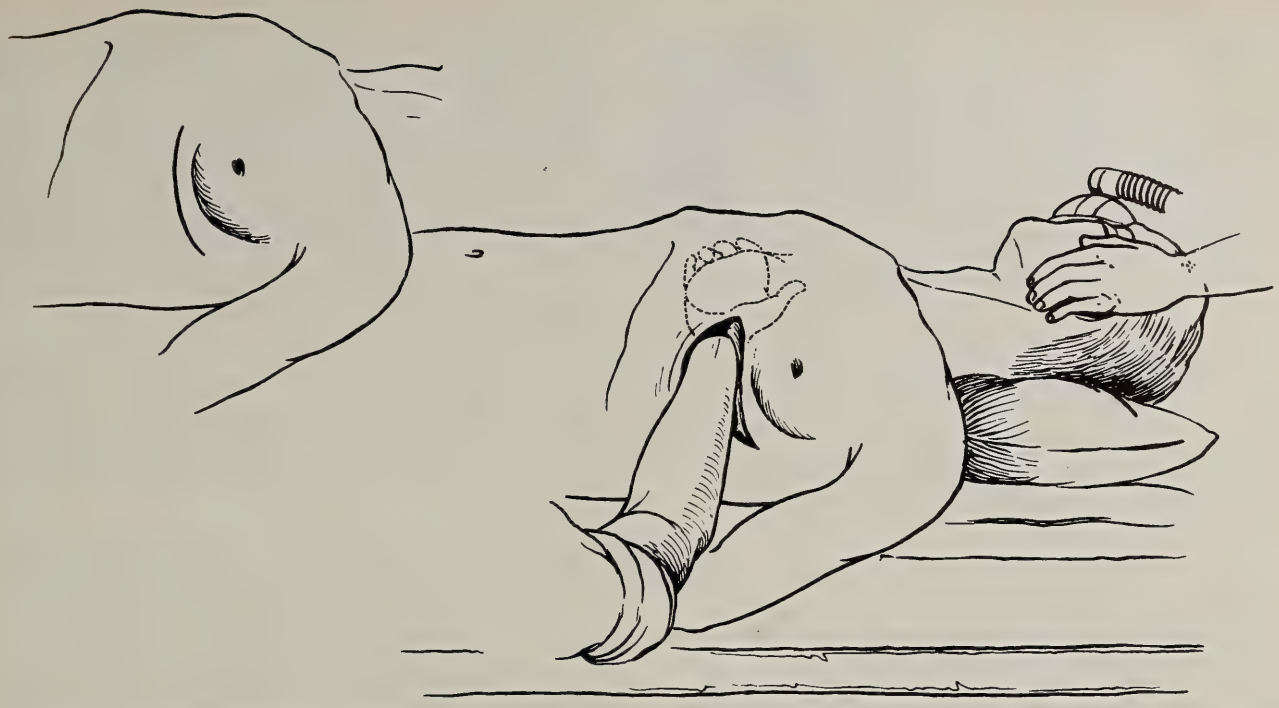


Figure 1.—A 5-inch incision has been made beneath the left breast, as indicated in the inset. With the chest thus opened, as shown in the main drawing, the hand has been forced between the ribs and the heart grasped in the cupped hand. The short incision helps to control pneumothorax. If inhalation oxygen is not available, mouth-to-mouth breathing, as illustrated in Figure 2, is carried out.

arrest occurred, to emphasize the fact that physicians present or attending the patient at the time action is needed may not be practicing general or thoracic surgery.

Recognition of Cardiac Arrest

Sudden cessation of the heartbeat in a conscious patient causes unconsciousness immediately. There is no pulse, blood pressure or heart sounds—which differentiates cardiac arrest from syncope. Respirations lag and soon cease, cyanosis usually appears, the pupils are dilated and the patient is limp. A thump over the sternum causes no response. If the heart is needled or if epinephrine is immediately available and injected into the heart and there is no response, surely the patient must die unless cardiac massage is started immediately.

Decision for or Against Cardiac Massage

If, in the hospital, cardiac arrest has occurred in a salvageable patient, if the time the heart has actually been arrested is less than four minutes, if the physician in attendance is equipped to perform the procedure (he alone can decide), and if assistance and equipment are readily available to complete the resuscitation successfully, then the attending physician should proceed with massage. There should be reasonable prospect of successful issue. It would seem that, other criteria being met, there should be no doubt as to the advisability of the procedure for a young healthy person undergoing a diagnostic study when sudden inhibition of heartbeat occurs.

Technique

The technique to be described differs slightly from that usually used in the operating room and is designed for use elsewhere in the hospital and without immediate access to equipment other than a knife. Almost all the details are indicated in Figure 1. The clothing is stripped from the patient's chest. Antiseptic preparation of the skin must be foregone. Rolling up the physician's sleeves is necessary, but obtaining and donning gloves probably would take too much time. An incision about five inches long, just big enough to admit the hand, is made beneath the left breast. A short incision will make for difficulty in forcing the ribs apart, but it facilitates control of pneumothorax if ventilation is not completely adequate. The incision is carried between the ribs through the intercostal muscles and through the pleura. The right hand is then forced through the opening and the heart is grasped as it lies in the midline beneath the sternum. It is compressed at a normal rate between the fingers and the thenar eminence of the thumb of the cupped hand. Considerable force is necessary. Unless the heart starts to beat immediately, it is necessary to force blood out through the ventricles so that a sufficient pulse can be obtained in the carotids or femoral arteries.

Simultaneously with the institution of cardiac massage, the lungs must be ventilated with oxygen. If this is not immediately available with a mask and tank, it should be supplied by mouth-to-mouth breathing (Figure 2). This is much to be preferred,

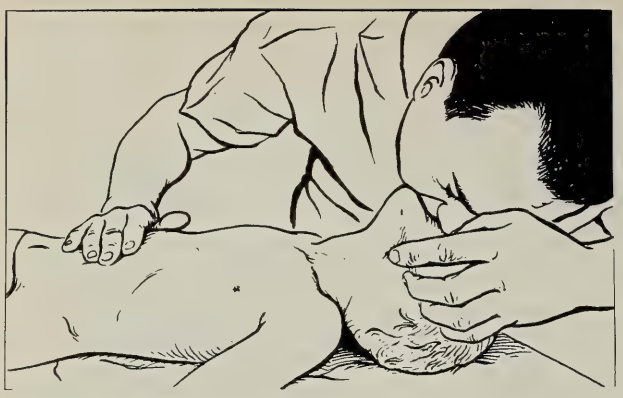


Figure 2.—With the jaw held forward with the operator's left hand, air is forced through the mouth and nose of the victim by intermittent expiration. The right hand is placed over the epigastrium to keep the stomach from filling with air.

as was observed by Gordon and coworkers,[5,10] over manipulative artificial respiration procedures both in the child and the adult, for it actually inflates the alveoli with a 16 per cent oxygen mixture which is more than adequate. To carry out the procedure, the jaw of the patient is lifted forward and the physician puffs air from his own lungs into the mouth of the patient. Expansion and recoil of the chest is then produced at about 20 times a minute until an oxygen mask or intratracheal tube arrives. A hand is pressed down on the abdomen to keep the stomach from becoming inflated.

Further details in opening the chest for better exposure, the use of epinephrine, calcium chloride,[18] the defibrillator,[1] the pacemaker,[7,28] vasopressor drugs, transfusion and fluids, hypothermia in selected patients,[14] chest closure and water-seal drainage can be utilized as indicated when a specialist arrives.

This article is written for those who would initiate the resuscitation. No detailed knowledge, experience or special information can possibly help a person in whom brain cells have been destroyed by too long an interval of cardiac arrest before institution of the simple technique here described.

It is believed that only in the hospital can cardiac massage for cardiac arrest be successfully completed except in the most unusual circumstances and, therefore, it is not advised except within the hospital.

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CASE REPORTS

Ruptured Abdominal Aneurysm with Pain in the Testicle

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THE MOST predominant symptom of ruptured aneurysm of the abdominal aorta is severe sudden pain in the lower abdomen or lower back. Pallor, the state of shock and tenderness in the abdomen or flanks are the most frequent physical findings, and sometimes a palpable abdominal mass, often pulsating may be observed.[1,2] There is some evidence to suggest that the aortic rupture itself is painless, and Sweet (cited by Copping[2]) suggested that the pain may be caused by blood tearing through the retroperitoneal tissues at aortic pressure.[2] In some cases the pain was such as to suggest renal disease.[3,4,5]

Recently I observed a patient with ruptured aortic aneurysm, whose only complaint following pain of short duration in the lower abdomen at the time of onset was pain in the testicle.

REPORT OF A CASE

The patient was a white man 59 years of age who twice had had coronary occlusion, first in January, 1953, and again in April, 1959. In January, 1957, cholecystectomy had been done for cholelithiasis. X-ray films of the chest taken at various times over the previous years had shown the heart to be of normal size and in transverse position. There was slight elongation and fusiform widening of the thoracic aorta. The patient's general health after the coronary occlusion in April, 1959, was considered good.

Then, on August 19, 1959, at 7:30 p.m., while eating dinner, he had a seizure of cramping lower abdominal pain with radiation to the right testicle. The pain was accompanied by profuse sweating and pronounced weakness. These symptoms lasted about ten to fifteen minutes. When examined at 8 p.m., the patient complained only of severe aching in the right testicle. There was no frequency or burning of urination and no blood in the urine. The temperature was 98° F., the heart rate 72, and the blood pressure 120/80 mm. of mercury. No tenderness was elicited over the kidneys, the abdomen or any part of the lower back. No muscular spasm or rigidity in the abdomen was noted. Despite the persistent pain in the testicle, it was not tender or abnormal in any observable way. The patient showed no signs of shock. For want of a better one, a diagnosis of possible renal calculus was considered. The patient was given 100 mg. of meperedine (Demerol) intramuscularly.

The only complaint continued to be persistent pain in the right testicle. An hour after onset of symptoms, the patient had a large bowel movement of brown, well formed stool. Shortly thereafter he vomited profusely.

At 10 p.m., generalized pallor developed, the blood pressure dropped to 90/70 mm. of mercury, and the pulse became rapid and thready. On further questioning the patient still spoke only of right testicular pain. A physical examination at this time was no more revealing than the one done earlier, except for shock. A diagnosis of ruptured aneurysm was considered.

An x-ray film of the abdomen showed complete obliteration of the right psoas shadow. The hematocrit was 45 per cent and the hemoglobin content was 14.7 gm. per 100 cc. of blood. Leukocytes numbered 17,800 per cu. mm.—91 per cent polymorphonuclear cells, (83 per cent segmented and 8 per cent stab forms), 6 per cent lymphocytes and 3 per cent monocytes. An electrocardiogram showed evidence of an old anteroseptal myocardial infarction, not changed from previous tracings.

The symptoms of shock deepened despite measures to alleviate it and the patient died at 11:30 p.m.

*Pathologist's Report.** At autopsy evidence of bleeding into the right retroperitoneal gutter was observed. A hemorrhagic mass at that site measured 20x10x8 cm. There was dissection of the hemorrhage into the mesentery of the colon, predominantly the ascending colon.

Calcific arteriosclerosis of the entire aorta, increasing in severity as the abdominal aorta was approached was noted. An aneurysm 10 cm. in diameter extended from just below the renal arteries to 1 cm. above the bifurcation of the aorta into the iliac vessels. It contained laminated clot (old), the unclogged lumen varying in size from 1 to 2 cm. On the right lateral surface of the inner wall of the aneurysm was a 2 cm. vertical defect which communicated with the previously described retroperitoneal hemorrhagic area. The hemorrhagic mass

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*Dr. Yosef Tiber.

surrounded the right kidney and the right ureter. The subscapular surface of the kidney showed numerous small pinpoint scars, suggestive of arterial disease, but the parenchyma appeared normal. The adrenal glands were not involved in the hemorrhagic mass.

The principal autopsy diagnoses were: (1) Ruptured abdominal aortic aneurysm with retroperitoneal hemorrhage; (2) arteriosclerosis of the kidneys; (3) arteriosclerosis of the coronary arteries and aorta.

SUMMARY

In the case of ruptured aneurysm of the abdominal aorta here reported, the predominant symptom was pain in the right testicle. There was neither tenderness in the abdomen and flanks nor a palpable mass in the abdomen. Not until the patient went into shock was the true diagnosis suspected.

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Adult Chickenpox Pneumonia

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PRIMARY VARICELLA PNEUMONIA in adults, previously reported as a rare disease,[2] was recently shown to be not uncommon in a series of adult cases of chickenpox.[1] The purpose of this report is to describe a case of adult varicella pneumonia, characterized by cyanosis and severe air hunger, and to indicate the importance of an x-ray film of the chest and careful thoracic examination in cases of chickenpox in adults.

REPORT OF A CASE

A 37-year-old white man was admitted to the 6510th USAF Hospital on May 27, 1958, because of severe shortness of breath. Two weeks before admission his 8-year-old child had had varicella, a disease the patient had not had as a child. He had had smallpox vaccination in 1957. Three days before admission a rash developed on the patient's forehead, face and trunk, then spread to his legs. Two days before admission he noted shortness of breath and cough productive of thin white sputum with occasional flecks of blood. Coughing grew constant, and shortness of breath became so severe that he presented himself to the hospital emergency room.

When examined, the patient, who was tall and well developed, was breathing shallowly and rapidly. The skin, nail beds and mucous membranes were cyanotic. A generalized eruption of mixed papules, vesicles and crusts typical of varicella was present. On the hard palate there was a small white vesicle. The entire lung fields were dull to percussion. Tactile and vocal fremitus were everywhere diminished, and medium moist, inspiratory and expiratory rales were heard anteriorly and posteriorly on both sides. All accessory muscles of respiration were being used.

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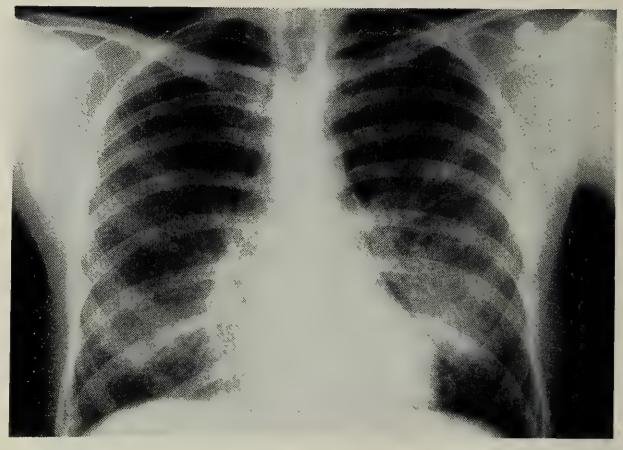


Figure 1.—The confluent and nodular nature of the generalized pulmonary infiltrate is shown in film taken at time of admission of patient to hospital.

The oral temperature was 102° F., the pulse rate 100 and the blood pressure 120/70 mm. of mercury.

Hemoglobin was 14 gm. per 100 ml. of blood. Leukocytes numbered 5,400 per cu. mm.—39 per cent neutrophils and 54 per cent lymphocytes. Results of urinalysis were within normal limits. A mixed flora was observed on microscopic examination of the sputum and no pathogens grew on a culture. Cultures of two specimens of blood taken the day of admission showed no growth. Cold agglutinins showed no titer the day of admission or two weeks later. Serum taken in the acute and the convalescent phases (studied at the California State Department of Public Health, Viral and Rickettsial Disease Laboratory, Berkeley) showed no significant titer or rise in titer for psittacosis, Q fever, adenovirus, coxsackie, influenza A and B, or the lymphogranuloma venereum group. An x-ray film of the

chest showed a confluent nodular infiltrate throughout both lung fields.

The patient was placed in an oxygen tent in orthopneic position and treated with penicillin and streptomycin until the reports of no growth of blood and sputum cultures were received. Tachypnea and cyanosis steadily decreased and supplementary oxygen was discontinued eight days after admission. Serial x-ray films indicated a change from a nodular to a linear lung infiltrate. He was discharged June 23, 1958, and remained well, with no abnormalities in x-ray films of the chest.

DISCUSSION

Forty-five cases of adult varicella had been reported in the literature previous to the present case. Although the pneumonia complicating childhood chickenpox is generally bacterial,[3] it is almost always viral when it occurs in adults. Postmortem examinations of adults who died of chickenpox have revealed typical pathological lesions of chickenpox in the lungs.[2] Dyspnea and cyanosis result from gross involvement of lung tissue and interference in oxygen exchange because of cellular debris present in the alveoli. On x-ray films the infiltrate often appears confluent and nodular.

Once proper studies have been performed to rule out bacterial cause of the pneumonia, symptomatic care with oxygen and maintenance of orthopneic position should be given. Antibiotics are futile.

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The Familial Occurrence of Chronic Lymphocytic Leukemia and Multiple Myeloma

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THE REPORT herewith is of the occurrence of chronic lymphocytic leukemia in a mother and multiple myeloma in one of her two sons. We have not been able to find a previous report of the presence of these two hematologic malignant diseases in the same family.

CASE 1. The patient, an 84-year-old white woman, was first observed at the Los Angeles County General Hospital in 1955 because of vague, generalized pain which had been present for many years. A diagnosis of chronic lymphocytic leukemia had been established by lymph node biopsy at another hospital in 1942. At that time leukocytes numbered 22,000 per cu. mm., 76 per cent lymphocytes. The diagnosis had been confirmed in 1950 by bone marrow examination and liver biopsy at the same hospital. Examination of the blood in 1953 showed 80,000 leukocytes per cu. mm., 95 per cent lymphocytes.

Upon physical examination in 1955 the patient was observed to be well developed and well nourished. Moderate cardiomegaly and auricular fibrillation were present. The edge of the liver was palpated one or two finger breadths below the right costal margin and the spleen two to three finger breadths below the left costal margin. There was no enlargement of peripheral lymph nodes. The hemoglobin content was 12 gm. per 100 cc. of blood and leukocytes numbered 48,400 per cu. mm., 90 per cent of them mature lymphocytes.

Between 1955 and 1959 the patient was observed from time to time in the outpatient medical clinic with occasional admission to the hospital for management of heart disease. The liver and spleen shrank during that time and were no longer palpable. Enlarged peripheral lymph nodes were never felt. The hemoglobin content varied between 10 and 12 gm. per 100 cc. and the number of leukocytes between 60,000 and 100,000 per cu. mm.

In March, 1959, the hemoglobin fell to 7.0 gm. per 100 cc. and the number of leukocytes rose to 118,000 per cu. mm. Two units of whole blood were given but the patient died about three weeks later. Autopsy was not done.

It is noteworthy that this patient did not receive specific antileukemic therapy at any time during the 17 years she was known to have lymphocytic leukemia.

CASE 2. The 51-year-old son of the patient in Case 1 entered Los Angeles County General Hospital in December, 1958, because of skeletal pain associated with osteolytic lesions demonstrated on roentgenograms taken by a physician he had consulted. The only abnormality noted on physical examination was tenderness over the thoracic and lumbar vertebrae and over the upper extremities. The hemoglobin content was 14.0 gm. per 100 cc. of blood and leukocytes numbered 8,400 per cu. mm. with a differential count on stained smear within normal limits. Urinalysis revealed 4+ proteinuria and Bence-Jones protein. The serum protein contents were within normal range. Roentgenograms showed multiple osteolytic lesions of the calvarium, humeri, radii,

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ribs and vertebrae. Microscopic examination of a specimen of bone marrow was consistent with a diagnosis of multiple myeloma with a large number of plasma cells, some with nucleoli.

Family Data

The patient in Case 2, who has no children, has one sibling, a brother, who has been examined by us and who has no evidence of hematologic disease, and his one daughter and one grandchild are reported to be well.

Comment

The familial occurrence of leukemia has been well demonstrated. Videbaek[9] compiled from the literature and from his own observations 86 authenticated cases of leukemia in 39 families. He also noted the co-existence of leukemia and cancer in the same patient and the higher incidence of cancer in the family members of leukemic patients when compared with a group of control families. Videbaek suggested, on the basis of his studies, that there exists a strong constitutional familial predisposition toward neoplastic disease. He found that, unlike cancer, the hematologic abnormalities of pernicious anemia, hemophilia and polycythemia vera were no more common in leukemic patients and their families than in normal controls.

Numerous other reports have appeared documenting the familial occurrence of leukemia. Anderson's[1] paper is noteworthy in that it reports the presence of lymphocytic leukemia in five of eight siblings. Gunz and Dameshek[3] noted the occurrence of lymphocytic leukemia in twin brothers and the subsequent development of a similar type of leukemia 25 years later in the son of one of these men.

Dameshek and Gunz[2] recently reviewed the role of heredity in leukemia. They called attention to a possible difference in the different types of leukemia and pointed out that most of the (about) 100 reported cases of familial leukemia are of the lymphocytic variety. They conclude that heredity may play an important part in the genesis of lymphocytic leukemia and lymphosarcoma, but may not be important for the other types of leukemia. It is of interest, in this connection, that lymphocytic leukemia is almost non-existent in the Japanese.

Schier[8] reviewed the several published examples of familial Hodgkin's disease and himself reported two instances of familial occurrence. Hennessy and Rottino[4] discussed the uncommon occurrence of Hodgkin's disease in children born of women who had the disease during pregnancy.

Familial multiple myeloma is apparently very rare. Only four well-documented cases of myeloma in close relatives have been reported. Mandema and co-workers[6] in 1954 published the first report of its occurrence in siblings. Nadeau and co-workers[7] described three cases of multiple myeloma in three members of two generations of the same family. Herrel, Ruff and Bayrd[5] found multiple myeloma in two brothers. The most recent example appeared in a case record of the Massachusetts General Hospital.[10]

The cases here reported are the first we know in which multiple myeloma and chronic lymphocytic leukemia have been found in close relatives. This may reflect a predisposition toward malignancy in this family, but, of course, may also be a coincidence. It is important for medical practitioners to document such occurrences as a prerequisite to the assessment of the role of heredity in human neoplasms.

The mother's case history illustrates an important point, namely, that a 17-year survival can occur in chronic lymphocytic leukemia without anti-leukemic therapy. This emphasizes again that all cases of chronic lymphocytic leukemia do not require therapy at the time the diagnosis is discovered. Indeed, an occasional patient, usually elderly, lives for many years with lymphocytic leukemia before treatment is indicated.

2025 Zonal Avenue, Los Angeles 33 (Rapaport).

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California MEDICINE

For information on preparation of manuscript, see advertising page 2

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EDITORIAL

A Million Dollars for Medical Education

CASH CONTRIBUTIONS to medical schools in the United States made by the California Medical Association in the past ten years have come to almost a million dollars.

Medical schools throughout the country, along with everybody else, have suffered in recent years from the effects of inflation. The costs of educating students have risen in proportion with other costs. Salaries have advanced, equipment and building costs have grown and expenses in all departments have followed the upward trend of general prices.

Coupled with these increased costs, the medical schools have often found themselves facing boards of trustees of large universities where the losses on medical training cannot be adequately made up by surpluses in other colleges or by increased endowment income. In these circumstances it was not unexpected that some medical school deans announced themselves in favor of federal subsidies to medical schools.

It is fortunate that some farsighted medical educators, working in conjunction with business interests, established both the American Medical Education Foundation and the National Fund for Medical Education some ten years ago. The AMEF, whose administrative costs are paid by the American Medical Association, collects contributions from physicians and pays them out to the medical schools. The same procedure is followed by the National Fund, except that its source of income is business and industry.

The California Medical Association was among the earliest state medical organizations to grasp the significance of these funds and to arrange to support them. Under the California program, each member of the Association contributes a small sum each year as part of his C.M.A. dues. The proceeds are turned over to the AMEF, 80 per cent earmarked for the three California medical schools which are not primarily tax-supported, the balance for the general fund to go equally to all medical schools.

While the contribution of the individual member (ten dollars a year, tax-deductible) is not great, the aggregate comes to a neat sum. In 1959, the Association contributed more than $156,000 in this manner. The three private schools in California received close to $42,000 each from this one source.

This annual effort represents medical organizations at their best—members of a profession contributing to the education of those who will follow them, even compete with them.

Medical education must be continued and must be strengthened. Federal funds which carry policy-making strings must be eschewed. The picture of today's physicians helping train tomorrow's is a pleasant sight and, we hope, a permanent monument to a graceful tradition.

Physicians and Population

"POPULATION EXPLOSION" is a term that has come into prominence in recent months.

In California, it is now quite obvious that the five medical schools in the state will not be able for some years to come to produce enough new physicians to meet the demands of a sharply increasing population.

Attention of the medical and the educational world has been focused on this problem in recent weeks through the publication of a treatise on "The West's Medical Manpower Needs." The volume comes from the Western Interstate Commission for Higher Education, popularly known as WICHE.

WICHE is the cooperative group of western educators who plan for the higher (professional) education of the youth of the 13 states making up the

organization. These are the Rocky Mountain and Pacific states plus our new neighbors, Hawaii and Alaska.

In its new publication WICHE looks at population forecasts for this region up to the year 1975. It analyzes the capacity of these states to produce medical graduates and to provide them in their own areas. It goes into the medical manpower needs of the western area and considers all elements which may call for more or fewer physicians per population unit.

Basically, the report finds that the western states are due for a tremendous gain in population between now and 1975, that the present medical schools in the area will fall far short of producing enough physicians to care for the anticipated population and that plans should be initiated now for educating and otherwise acquiring more physicians for the immediate future.

Population increases from 1955 to 1975 are estimated in this study to run from as little as 22 per cent for Montana to as high as 158 per cent for Nevada. California, the state with by far the largest population in the area, is expected to have 23,565,000 people by 1975, or close to 88 per cent ahead of 1955 figures.

In the chapters on how many physicians are needed to serve today's population, the WICHE study shows a 1955 average of about 140 physicians per 100,000 population. California topped that figure considerably, with 159 physicians per 100,000. In 1957 this figure had dropped to 157 as the state's population continued its rapid expansion. To maintain the 1955 ratio, California will need a net increase of some 13,000 physicians by 1975.

It is interesting to note that estimates of physicians required to serve the 1975 population are based primarily on the individual opinions of the medical and educational experts making up the WICHE study team. The advent of new drugs, more effective therapy, more widespread use of technicians and other factors are expected to make it possible for one physician to serve more people. On the other hand, the study shows that "more people want more medical service" and are able to pay for it.

California's physician-to-population ratio today shows one physician for about every 640 people. During World War II the War Manpower Commission ordered that no community should have its physicians depleted below an average of one to each 1,500 people. Even so, in some areas the ratio ran as high as one per 3,000. Fortunately, there were no major outbreaks of disease to strain these overloaded ratios but, conversely, the physicians remaining in their communities at that time managed to handle their added professional load in splendid fashion, even though many of them were the older men, the physically handicapped and others who were deemed least suited for military service.

These figures, not included in the WICHE study, may serve as a background of comparison with the estimates made in this survey.

If the WICHE estimates are correct, the California Medical Association may look forward to a 1975 membership of about 30,000, a figure which appears acceptable in the light of annual C.M.A. membership gains in recent years. A net membership increase of four per cent a year would bring C.M.A. membership close to 31,000 in 1975; the Association has actually enjoyed an average annual gain of more than four per cent net in recent years.

Reflection on these forecasts must revert to recent experience in California, where medical population has been growing along with the general populace. In the five-year period 1954-1958, the state licensed an average of 2,032 physicians a year. Of these, only 281, on the average, were graduates of California medical schools. About half those licensed each year come to California through reciprocity licenses in other states, and about one-quarter are diplomates of the National Board of Medical Examiners whose credentials are acceptable here.

These statistics would seem to indicate that where the general population increases, the medical population does likewise. The physician-to-population ratio in the state has not varied much in the past 20 years. To reduce the matter to extremely general language: Every time 650 people come to California from other areas they bring one physician with them.

In light of the inability of California's medical schools to train enough new physicians to meet the growing needs, and with a quite practical consideration of the cost to our state even if more could be trained, this tendency of new population to attract physicians who were trained elsewhere is one that we as taxpayers may welcome.

Where gaps exist in medical manpower, foreign graduates help to fill them. However, this is not true to any great extent in California, which has been slow to accept many foreign medical men. This aspect may well be discounted in our current consideration of medical needs, at least as far as this state is concerned.

Medical education requires many years, especially where the graduate chooses a specialty and takes two to five years' additional training following the internship year. For this reason, and because the establishment or expansion of a medical school requires additional years of planning, WICHE suggests looking ahead 15 years to the time when new medical graduates may be expected from new

schools or expanded programs in our present schools. Its study shows the need of both new schools and larger classes in the schools we already have.

In view of the certain prospect of population increases in the western area in the coming years, in view of the need for additional physicians to serve this population, and in view of the years of advance planning needed to fill this demand for medical care, the WICHE study is most timely. Even if some may argue with the estimate of the ability of one physician to serve more or fewer patients as time goes on, it is obvious that we will need more physicians in California to serve the ever-growing population. Plans must be made at once for action to take place later. It is to be hoped that we have not already waited too long to plan for an orderly program.

Letters to the Editor...

Physical Examinations for Physicians

WE ARE CERTAIN that the following information merits publication in CALIFORNIA MEDICINE since it is obviously a matter of general interest to your readers.

On August 12, 1959, the Culver City Hospital instituted a program of physical examinations for all professional members of the staff. This program includes a complete physical examination, x-ray of the chest, electrocardiographic study, complete blood count, urine analysis, serology, blood sugar and cholesterol estimation.

In addition, where chief complaints warrant, additional laboratory and x-ray studies are conducted.

It should be emphasized that the basic physical and laboratory procedures, along with any additional studies, are conducted completely free of charge.

It is interesting to note that according to the examining doctors at least 20 per cent of the physicians undergoing these examinations have additional x-ray and laboratory examinations. To our knowledge no other hospital in Southern California has undertaken this program.

The success of this program to date has been most satisfactory inasmuch as 50 per cent of the staff members have already availed themselves of the opportunity of these voluntary checkups.

The committee in charge of this program consists of F. H. Blanchard, M.D., Louis Paddie, M.D., Milton Rosenthal, M.D., J. G. Conti, Jr., M.D., Samuel Steinberg, M.D., Alfred Conti, M.D., and Sidney Messer, M.D., chairman.

Sincerely,

DAVID M. BROTMAN, M.D.,
Medical Director, and
JAMES G. CONTI, JR., M.D.,
President of Staff, Culver City Hospital

California MEDICAL ASSOCIATION

NOTICES & REPORTS

Council Meeting Minutes

Minutes of the 454th Meeting of the Council, Canterbury Hotel, San Francisco, December 12, 1959.

The meeting was called to order by Chairman Lum in the English Room of the Canterbury Hotel, San Francisco, on Saturday, December 12, 1959, at 9:30 a.m.

Roll Call:

Present were President Reynolds, President-Elect Foster, Speaker Doyle, Vice-Speaker Heron, Secretary Hosmer, Editor Wilbur and Councilors MacLaggan, Wheeler, Todd, Quinn, O'Neill, Kirchner, O'Connor, Shaw, Gifford, Harrington, Davis, Sherman, Campbell, Lum, Bostick and Teall.

Quorum present and acting.

Present by invitation were Messrs. Hunton, Thomas, Clancy, Collins, Marvin, Whelan and Dr. Batchelder of C.M.A. staff; Messrs. Hassard and Huber of legal counsel; Eugene Salisbury of staff and the Public Health League of California; John Fraser of the Public Health League; county society executives Scheuber of Alameda-Contra Costa, Geisert of Kern, Pettis and Field of Los Angeles, Brayer of Riverside, Donmyer of San Bernardino, Nute of San Diego, Thompson of San Joaquin, Dochterman of Sacramento and Dermott of Sonoma; Dr. A. E. Larsen and Messrs. Paolini, Lyon and Virello of California Physicians' Service; Dr. L. E. Osgood and Mr. M. R. Karstaedt of Visalia; Dr. John Morrison, president of the Alameda-Contra Costa Medical Association; Dr. Robert Holmes, president of the San Mateo County Medical Society; Dr. Daniel Blaine, Director of the State Department of Mental Hygiene; Dr. Malcolm Merrill, Director of the State Department of Public Health; and Dr. John Keye, medical director of the State Department of Social Welfare; Dr. Russell Ferguson, health officer of Santa Cruz County, and Doctors Dan O. Kilroy, Thomas Elmendorf and Francis E. West.

1. *Minutes for Approval:*

On motion duly made and seconded, minutes of the 453rd Council meeting, held October 31, 1959, were approved.

2. *Membership:*

(a) A report of membership as of December 10, 1959, was presented and ordered filed.

(b) On motion duly made and seconded, 87 members who had become delinquent and subsequently paid their dues were voted reinstatement.

(c) On motion duly made and seconded, Doctor Bernice I. Swenson of Alameda-Contra Costa County, was voted Retired Membership.

(d) On motion duly made and seconded in each instance, four applicants were voted Associate Membership. These were: Bernhard G. Anderson, Loren W. Heather, Carol E. Query, Orange County; Clark Richardson, Tulare County.

(e) On motion duly made and seconded, reductions of dues were voted for six members because of illness or postgraduate study.

3. *Liaison Committee to Social Welfare:*

Dr. Sherman reported that the Liaison Committee to the State Department of Social Welfare had discussed with Dr. Russell Ferguson, public health officer of Santa Cruz County, a program which he

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has initiated there, to provide a plan of hospitalization for surgery, plus dental care, to recipients of aged and needy blind benefits. Dr. Ferguson intends to present this plan to the State Department of Social Welfare for possible use in other areas. The Liaison Committee has referred the plan to Dr. Batchelder, Mr. Whelan and Mr. Lyon of C.P.S. for study. On motion duly made and seconded, this procedure was approved.

Dr. Sherman also reported on Resolution No. 43 from the 1959 House of Delegates. This called for federal and state funds to be used for the purchase of health insurance for welfare recipients. Inasmuch as a pilot program of this type is under way in Glenn County, the committee felt that the intent of the resolution was being met and that no further action was needed at this time. On motion duly made and seconded, this procedure was approved.

Discussion was held on a manual prepared by welfare authorities as a screening guide in categorizing diagnoses of illness. On motion duly made and seconded, it was voted to oppose the use of this type of guide by nonmedical personnel.

4. *Report of the President:*

President Reynolds reported on recent meetings he had attended in Honolulu and Minneapolis on the subject of prepayment medical care plans. He also requested advice from the Council on a letter which had been voted at the previous meeting to be prepared for all Association members over his signature. Two proposed drafts of this letter were presented and reviewed. Letters from several county societies, including Los Angeles, Alameda-Contra Costa and San Diego, were read by members. On motion duly made and seconded, it was voted that draft "A" of the proposed letter be sent to all C.M.A. members over Dr. Reynolds' signature.

5. *Report of the President-Elect:*

Dr. Foster reported on the recent A.M.A. meeting in Dallas and on a conference staged by the A.M.A. Council on Medical Service in conjunction with the meeting, at which various medical care programs were reviewed.

6. *Finance Committee:*

Dr. Heron presented a new form of financial report, showing the net asset value of the Association and its allied organizations, including Trustees of the C.M.A., Physicians' Benevolence Fund, Inc., Audio-Digest Foundation and Pacific Magnetic Tape Equipment Co. It was announced that such reports would be provided at quarterly intervals.

Mr. Hunton explained the necessity of borrowing funds in the final months of the year and suggested that where the Trustees of the C.M.A. or Physicians' Benevolence Fund had available funds, such borrowing be made from them at prevalent interest rates for short-term investments rather than from banks at higher rates. On motion duly made and seconded, this procedure was voted approval.

7. *Woman's Auxiliary:*

A request from the Woman's Auxiliary for the appropriation of additional funds for publication of its *Courier* was presented and referred to the Finance Committee because of the additional money involved.

8. *Committee on Nominations:*

Dr. Bostick reported that nominations were soon due for vacancies on the Board of Trustees of California Physicians' Service. On motion duly made and seconded, approval was voted for the following nominees: Dudley M. Cobb, Jr., M.D., Los Angeles; Mr. Ransom M. Cook, San Francisco; John R. Hilsabeck, M.D., Santa Ana; John G. Morrison, M.D., San Leandro; Herman H. Stone, M.D., Riverside.

Dr. Bostick also suggested the advisability of naming committees to serve under the Cancer Commission. On motion duly made and seconded, this proposal was approved.

On motion duly made and seconded, it was voted that the present *ad hoc* Committee on Traffic Safety constitute this committee until the 1960 Annual Session and that it report to the Council before that time.

9. *Commission on Medical Services:*

Mr. Hassard referred to an earlier Council action which requested immediate action on implementing the provision of adequate medical and allied care for older citizens; he reported that Messrs. Salisbury and Fraser were now visiting county societies to alert them to the need of compiling inventories of facilities available for the aged group. These visits will be followed by visits from staff members, who will assist the county societies in gathering and compiling the necessary information for such studies. On motion duly made and seconded, it was voted to approve this procedure in principle.

10. *Commission on Community Health Services:*

Dr. MacLaggan reported that some of the services which had been eliminated from the "Medicare" program were now being restored and that military dependents benefiting from this program would be allowed free choice of physician in many instances under the new regulations.

11. *Commission on Public Policy:*

Dr. Dan O. Kilroy, chairman of the Commission on Public Policy, and Dr. Malcolm Watts, chairman

of the Committee on Public Relations, reported on a meeting held the previous day, at which discussion was held on a proposed program of public relations.

Mr. Hassard discussed a study which had been made on possible means of complying with the intent of Resolution No. 18 from the 1959 House of Delegates, which suggested the employment of outside public relations counsel. The resolution was referred to the Commission on Public Policy, which will make a further report.

Mr. Eugene Salisbury outlined a campaign of correspondence for the use of physicians in opposing federal legislation deemed inimical to the interests of the profession.

President Reynolds read an editorial from a San Francisco newspaper which suggested the removal of earnings limitations on recipients of Social Security benefits. On motion duly made and seconded, he was authorized to write to the paper and to Representative Curtin of Pennsylvania to indicate that the Association approves this type of legislation.

12. *State Department of Public Health:*

Dr. Malcolm Merrill reported that Governor Brown had named the members of the Cancer Advisory Council and of the Citizens Committee on the Health Needs of the People.

13. *Commission on Medical Education:*

On motion duly made and seconded, approval was voted for two proposals submitted by the Commission on Medical Education.

On motion duly made and seconded, approval was voted to reduce the registration fees for postgraduate institutes to $15 a member.

On motion duly made and seconded, approval was voted for a decision of the Committee on Scientific Work to oppose the creation of a new scientific section dealing with chest diseases.

A list of nonmembers to appear on the 1960 Annual Session program was presented and approved. On motion duly made and seconded, the staff was instructed to prepare By-Law amendments to eliminate the necessity of the Council supervising the list of guest speakers.

14. *Tulare County Medical Society:*

Dr. L. E. Osgood of Visalia reported on the formation in his area of the American Patients' Association, a cooperative organization sponsored by college faculty members. On motion duly made and seconded, it was voted to offer assistance to the Tulare County Medical Society, under the supervision of the Commission on Medical Services, in observing this development.

Adjournment:

There being no further business to come before it, the meeting was adjourned at 5:15 p.m.

DONALD D. LUM, M.D., *Chairman*
MATTHEW N. HOSMER, M.D., *Secretary*

In Memoriam

BRUST, PAUL RAYMOND. Died in San Diego, December 24, 1959, aged 65. Graduate of Stanford University School of Medicine, Stanford-San Francisco, 1926. Licensed in California in 1926. Doctor Brust was a member of the San Diego County Medical Society.

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KOHLMOOS, HENRY J. Died in Piedmont, December 5, 1959, aged 94, of bronchopneumonia. Graduate of Hessische Ludwigs-Universitat Medizinische Fakultat, Giessen, Hesse, Germany, 1893. Licensed in California in 1896. Doctor Kohlmoos was a retired member of the Alameda-Contra Costa County Medical Association and the California Medical Association and an associate member of the American Medical Association.

✤

MARCUS, JOSEPH HARVEY. Died in Los Angeles, December 24, 1959, aged 57. Graduate of Tufts University School of Medicine, Boston, Massachusetts, 1929. Licensed in California in 1930. Doctor Marcus was a member of the Los Angeles County Medical Association.

✤

PERELSON, HAROLD NATHAN. Died December 6, 1959, aged 50. Graduate of State University of New York College of Medicine at New York City, Brooklyn, N. Y., 1935. Doctor Perelson was a member of the Los Angeles County Medical Association.

✤

RUSSELL, RALPH SWISHER. Died in La Jolla, December 10, 1959, aged 59. Graduate of University of Nebraska College of Medicine, Omaha, 1925. Licensed in California in 1939. Doctor Russell was a member of the San Diego County Medical Society.

✤

WORTHINGTON, LOIS CLAIR. Died in Bakersfield, December 20, 1959, aged 84. Graduate of Cooper Medical College, San Francisco, 1897. Licensed in California in 1898. Doctor Worthington was a member of the Kern County Medical Society.

✤

YOCOM, FRANK WILLIS. Died December 29, 1959, aged 75. Graduate of University of California School of Medicine, Berkeley-San Francisco, 1922. Licensed in California in 1922. Doctor Yocom was a member of the Los Angeles County Medical Association.

10th ANNIVERSARY

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March 31 and April 1

PROGRAM

THURSDAY, MARCH 31

Morning Session

Therapeutics

9:00-9:30—**Recent Developments in Hemopoetic Agents**—C. Joan Coggin, M.D.

9:30-10:15—**Anatomy and Physiology of the Skin as Related to Standard and New Dermatomucosal Therapeutic Agents**—Clement E. Counter, M.D. (Last 20 minutes a panel discussion.)

10:15-10:45—**Recent Advances in the Therapy for Toxemia of Pregnancy**—Ervin E. Nichols, M.D.

11:00-11:45—**Panel: Specific Laboratory Diagnosis of Thyroid Disease with Well-Defined Indications for Thyroid Therapy.**

11:45-12:15—**When Is Thyroid Surgery to Be Done?**—Arthur C. Miller, M.D.

Afternoon Session

Geriatrics—Section 1

2:00-3:00—**Geriatrics and Rehabilitation Clinic**—John E. Affeldt, M.D. (Cases from Santa Rosa.)

3:00-3:30—**Geriatric Urology**—Roger Wm. Barnes, M.D.

3:45-4:30—**A Trip Through the Kidney**—C. Joan Coggin, M.D.

4:30-5:00—**Panel Discussion and Question and Answer Period.**

Obstetrics and Gynecology—Section 2

2:00-3:00—**When Is Endometriosis a Surgical Problem?**—G. E. Norwood, M.D.

2:30-3:00—**Surgical Complications of Pregnancy**—Ervin E. Nichols, M.D.

3:00-3:30—**The Impact of Surgery on the Patient's Metabolism**—Edward R. Bloomquist, M.D.

3:45-4:30—**Diagnosis and Management of Bleeding in the Three Trimesters of Pregnancy**—Ervin E. Nichols, M.D.

4:30-5:00—**Panel Discussion and Question and Answer Period.**

FRIDAY, APRIL 1

Morning Session

The Breast

9:00-9:45—**Anatomy and Physiology of the Breast—Significance of Cyclic Changes and Such States as Adenosis**—G. E. Norwood, M.D.

9:45-10:30—**Diagnosis and Surgical Management of Benign Tumors of the Breast**—Arthur C. Miller, M.D.

Surgery—Section 1

10:45-11:30—**How to Select Patients for Heart Surgery**—C. Joan Coggin, M.D.

11:30-12:15—**Recent Developments in Anesthesia and New Pharmacological Adjuncts**—Edward R. Bloomquist, M.D.

Dermatology—Section 2

10:45-12:15—**Dermatological (Wet) Clinic and Demonstration of Therapeutic Modalities and Minor Office Surgery**—Clement E. Counter, M.D.

Afternoon Session

2:00-2:45—**Pediatric Urology**—Roger Wm. Barnes, M.D.

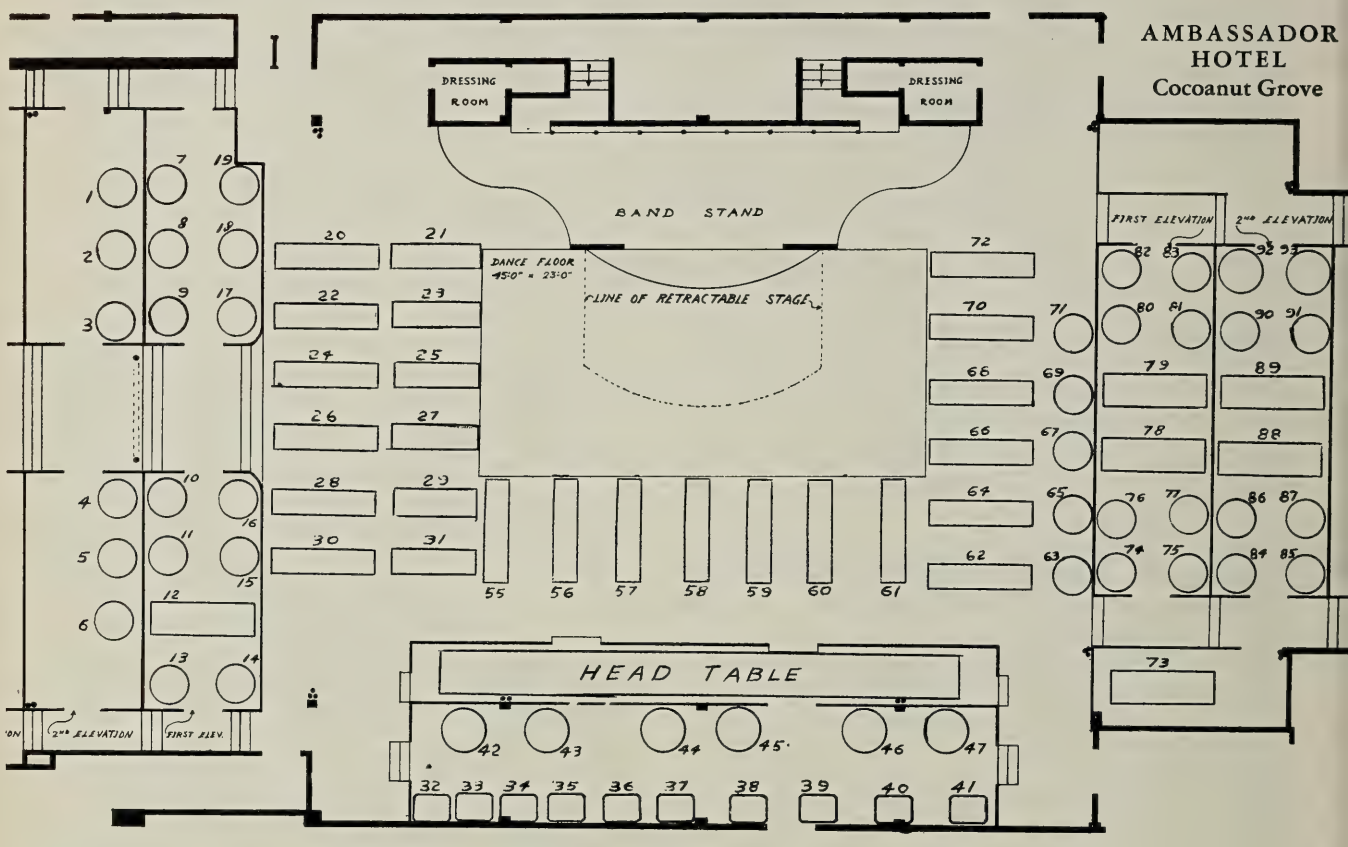
2:45-3:30—**Panel: Energetics (the Metabolism of Energy) and Its Relationship to Fatigue—Obesity—Psychosomatics.**

3:30-4:30—**Summary of Session and Final Question and Answer Period.**

HOST: Sonoma County Medical Society . . . **REGIONAL CHAIRMAN:** H. Ward Wick, M.D., 858 Fourth Street, Santa Rosa. **INSTITUTE FEE:** $15.00. For additional information contact Postgraduate Activities office, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5. **All California Medical Association members and their families are cordially invited to attend.**

COME to the...

ANNUAL SESSION



Choose the location of your table from the floor plan above. The corresponding table number below gives the number of seats at each table. Please fill out coupon on opposite page.

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GO to the...

Presidents' Dinner-Dance

SUNDAY, FEBRUARY 21, 8 p.m.

Cocoanut Grove

Entertainment: LENA HORNE

Music for Dancing: DICK LA SALLE

Food: Prime Rib Dinner

Cost: $12.50 per person including tax, tip and cover

TICKETS ARE NOW ON SALE—USE COUPON BELOW

Your tickets will be held for you at the door. A receipt for your check will be sent to you. Please present this receipt at the door for your ticket, Sunday night.

OR

Tickets may be picked up at any time Sunday morning or afternoon, February 21, at ticket booth, Woman's Auxiliary registration desk. Requests for tables for large parties should be sent in one envelope and early.

MISS LOUISE KALINICH
Los Angeles County Medical Association
1925 Wilshire Boulevard
Los Angeles 57, California

Enclosed is my check for $_____. Please send me_____ticket(s) to the PRESIDENTS' DINNER-DANCE, Sunday, February 21, 1960.

Table Choice_____ _____ _____ —or assign next best available_____
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Name_____

Address_____

(Make checks payable to the California Medical Association)

PUBLIC HEALTH REPORT

MALCOLM H. MERRILL, *M.D., M.P.H.*
Director, State Department of Public Health

INFLUENZA and influenza-like illness spread to several areas in the state during January, particularly in Los Angeles, Fresno and Merced counties.

The department's Viral and Rickettsial Disease Laboratory has identified A-2 (Asian strain) influenza virus from patients in Stanislaus, Kern, San Bernardino, San Diego, Fresno and Orange counties.

While there has been nothing unusual reported from northern California, word was beginning to filter in on above-average school absenteeism as this report was being written. Two school districts in Santa Clara County reported absenteeism is up to 14 per cent, as compared with 8 per cent normally, and absenteeism is running between 10 and 12 per cent in Contra Costa County.

The department has recommended immunization with polyvalent vaccine including Asian strains for persons for whom onset of influenza might represent an added health risk, such as individuals with cardiovascular or pulmonary conditions, persons with chronic illness of any type, and pregnant women. It might also be wise to immunize key community personnel, such as communications workers, firemen and policemen, and health forces.

* * *

In mid-November the Bureau of Acute Communicable Diseases began to receive reports indicating an increasing incidence of gastrointestinal disease. The disease is characterized by nausea, vomiting and diarrhea usually lasting from one to three days. It has been severe enough in some infants to require hospitalization.

Twelve health jurisdictions have reported illness of this type: Alameda, Colusa, Los Angeles, Merced, Napa, Sacramento, Santa Clara, Shasta and Sonoma counties and the cities of Long Beach, Los Angeles and Pasadena.

The cities of Los Angeles and Long Beach and Shasta County have noted increased absenteeism in schools related to gastrointestinal illness. Two outbreaks have occurred in homes for the aged.

Bacteriologic studies in these two homes, and in two other outbreak areas, have all been negative for the usual pathogens. Similar epidemics of such disease with negative bacteriologic studies have led to suggestion that a virus is the etiologic agent.

The State Health Department's Viral and Rickettsial Disease Laboratory is attempting viral isolation from the two outbreaks. No further specimens for viral work are requested at this time. However, information concerning outbreaks is needed, and will be useful in describing the geographic and temporal distribution of the disease.

* * *

A study of the metabolism of zinc in persons with liver damage will be continued by the department for the next three years under a $55,000 grant awarded by the National Institutes of Health.

Dr. Wendell R. Lipscomb, chief of the Study and Investigation Section of the Division of Alcoholic Rehabilitation, and Dr. Harold L. Helwig, chief of the Air Sanitation and Industrial Hygiene Laboratory, in 1959 instituted the study after Harvard researchers and others reported that excretion of zinc is increased in animals and humans with cirrhosis of the liver. This trace metal is essential for the function of several enzymes of the body.

Preliminary work in the department has included development of improved methods for the analysis of zinc and confirmation that the metabolism of this trace metal is altered by liver malfunction. The federal grant will support a joint laboratory and epidemiological investigation of the occurrence of liver cirrhosis in selected populations of the state.

* * *

It happened again in 1959—a new record high in baby production, some 356,000 live births, a rate of 23.3 per 1,000 population. This is an increase of 7,000 over the year before.

The number of deaths is estimated at 128,000, an increase of 2,000 over 1958. With the state's increased population taken into account, this gives a rate of 8.4 per 1,000 population, a decrease in last year's rate of 8.5. It is estimated there were 47,000 deaths from heart disease, 21,000 from cancer, and 8,000 from accidents.

Provisional information indicates there were 102,000 marriages in California during 1959, a rate of 6.7 per 1,000 population, higher than the rate of 6.5 recorded in 1957 and 1958.

* * *

Dr. Harold M. Erickson on January 4 assumed his duties as new deputy director. Dr. Erickson had been director of the Oregon State Health Department since 1945. He fills the vacancy left by the death of Dr. Frederic M. Kriete in July.

* * *

Under a mandate from the 1959 Legislature, the

Bureau of Crippled Children Services is undertaking a four-year study and pilot program in the field of medical care for children suffering from epilepsy.

Study purposes are to determine as nearly as possible the incidence of the disease, the caseload among children, services available, services needed, educational services and attitudes, social implications, and estimated costs of full services should the condition be taken on as a fully eligible disease under Crippled Children Services.

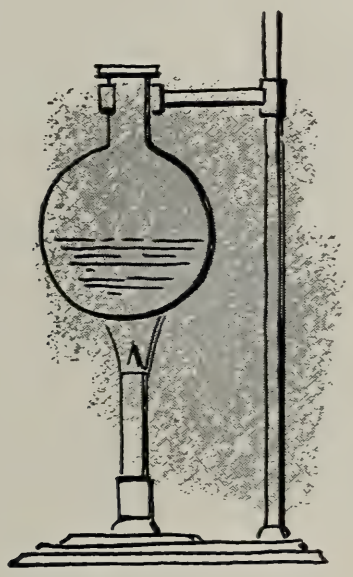
Dr. Harry E. Howard has joined the staff as medical officer in charge of the study. He left the position of district health officer with the San Francisco Health Department to take charge of the epilepsy project.

Standards for air quality and motor vehicle exhaust emissions were adopted by the State Board of Public Health in a December 4 meeting in Berkeley.

The standards were developed at the request of the Governor and the Legislature, and represent a pioneering effort in the field of air pollution control. They may very well establish a pattern for other states to follow.

* * *

The cost of certified copies of birth, death and marriage records will double January 1, from $1 to $2. The increase was enacted at the last session of the Legislature, and goes into effect in all local custodial offices and in the office of the State Registrar of Vital Statistics.





WOMAN'S AUXILIARY
TO THE CALIFORNIA MEDICAL ASSOCIATION

THE INITIALS WA/SAMA represent the Woman's Auxiliary to the Student American Medical Association. This auxiliary became a national organization in 1957 at Philadelphia.

Before that, the wives of medical students in several of the medical schools in this country were organized into social or study groups under such names as "Medwives" and "Medical Dames." In September 1955 the first chapter of the Woman's Auxiliary to the Student American Medical Association was developed at the University of Oklahoma School of Medicine.

The original idea for a student wives' organization is credited to Mrs. George H. Garrison of Oklahoma City. She wrote the following to the county auxiliaries in Oklahoma:

"Our auxiliary can scarcely afford to ignore so sincere a request for assistance. It will require very little outlay of effort or money on our part but the benefits that we will receive in future well-trained doctors' wives and the satisfaction that we have really served a need cannot be measured in hours and cents."

Wives of interns and residents in the area, as well as medical school students make up the Oklahoma group. They have described their purpose in organizing as twofold: to acquaint student wives with the profession of medicine and prepare them to take their position and responsibility as doctors' wives in the community where they may eventually settle; and to bring medical students and their wives into much-needed closer relationship with the local medical profession and their families for mutual benefit.

A one-year program outline suggested by these student wives covers a variety of topics. Included are a brief history of medicine, information about the medical school, a preview of the years to be spent there, the choices after medical schooling is completed, the doctor and his family, medical ethics, community responsibility, medical legislation and hobbies.

Panel discussions by doctors' wives on such matters as choice of location, finances and telephone etiquette and home-practice etiquette for wives are included in the program.

There are 38 chapters divided into eight geographical regions in 49 states, Puerto Rico and the District of Columbia. Chapter activities vary according to the needs and desires of local members. Membership in the auxiliary to the SAMA is open to the wife of any medical student, intern or resident. The aim of SAMA auxiliary is educational. What could be of more importance than learning to become good wives of men who deserve the best?

The student A.M.A. was formed in Chicago in 1950. Today the Association is composed of more than 55,000 active and affiliate members in 74 medical schools and hundreds of hospitals throughout the United States and its territories.

Constitutional provisions provide active membership to students in SAMA-affiliated schools without respect to race, religion, color or sex. Active members are medical students who join affiliated chapters and maintain both national and local dues structures; affiliate members are interns and residents; members-at-large are medical students in schools as yet unaffiliated or American students enrolled in foreign schools; honorary members are practicing physicians and friends of SAMA who maintain a continuing interest in the Association.

Except for the Executive Director and his staff, all officers, delegates and committee members are medical students, interns or residents. The constitution of the Association clearly defines the reason for its existence: "The objects of this Association shall be to advance the profession of medicine, to contribute to the welfare and education of medical students, interns and residents, to familiarize its members with the purposes and ideals of organized medicine, and to prepare its members to meet the social, moral and ethical obligations of the profession of medicine."

Thus we have the Student American Medical Association and auxiliaries joining the American Medical Association and its auxiliary "to assist the medical profession in its determined effort to provide the best medical care for the people of the world."

MRS. THEODORE A. POSKA
President, Woman's Auxiliary to the California Medical Association

INFORMATION

Tax Deductibility

The Status of Accident and Health Insurance Premiums

HOWARD HASSARD, San Francisco
Peart, Baraty & Hassard
General Counsel, California Medical Association

A RECENT decision of the Third Circuit Court of Appeals has again turned attention to the question of the deductibility of premiums paid for accident and health insurance. The Third Circuit ruled in the case of *Heard v. Commissioner*[1] that premiums paid for such insurance are deductible in their entirety as medical expenses even though they cover loss of life, limb, time and other disabilities. This ruling is contrary to the long established position of the Treasury that premiums for an accident and health policy insuring against loss of life, limb, sight and time are not medical expenses and thus nondeductible.

The purpose of this article is to analyze the effect of the Heard rule, and specifically its effect on the deductibility of premiums paid by members of the California Medical Association participating in the Association's group disability insurance plan.

Under the Association's group disability policy, which is titled "California Medical Association Disability Insurance Program," a subscribing member is insured against loss of life, limb, sight or time resulting from accidental bodily injuries, and for loss of time caused by sickness or disease. The Association also has a hospitalization policy under which participating members are reimbursed for hospital expenses. However, this latter insurance, termed "Catastrophic Hospitalization Insurance," is a separate contract with separate individual membership certificates issued thereunder and bears no relationship to the group disability policy. Premiums paid for hospitalization under the hospitalization insurance plan, are expenses paid for medical care and thus are fully deductible as medical expenses.

The Internal Revenue Service has taken the position in a series of rulings,[2] dating back to 1953, that premiums paid for accident and sickness benefit insurance that does not provide reimbursement to the insured for medical and hospital expenses are not deductible as a medical expense. In the event such a policy provides for both accident and sickness benefits *and* reimbursement for medical and hospital expenses, then only that portion of the premium attributable to the medical and hospital expenses is deductible as a medical expense. The decisions of the Tax Court are in accord[3] with that position. Thus, until the decision of the Third Circuit Court in the *Heard* case, it was well settled that disability insurance premiums were not deductible either as medical expenses or as business expenses.[4]

In the *Heard* case, the taxpayer paid premiums on policies providing benefits for accidental loss of life, limb, sight and time and also providing for reimbursement of medical expenses resulting from nondisabling accidents. The taxpayer deducted the total premium as a medical expense. The Tax Court held that only that part of the premium which provided for reimbursement of medical expenses qualified as a deductible medical expense. The Government officially acquiesced in the decision, announcing that the principle set by the ruling would be followed by the tax authorities. The case was then appealed to the Third Circuit Court of Appeals, which reversed the Tax Court, holding that the total premiums paid for health and accident policies were properly deductible as expenses for medical care, despite the fact that only a portion of each premium payment was attributable to medical or hospitalization coverage. The appellate court held that the tax law allows deduction of expenses paid for medical care, that the law includes "amounts paid for health or accident insurance" in the definition of medical care[5] and is not to be construed to exclude amounts paid to provide benefits for loss of life, limb, sight or time.

The Internal Revenue Service has issued a Revenue Ruling[6] stating that it will not follow the decision of the Third Circuit in the *Heard* case. The case is directly contrary to existing revenue rulings on the subject and has been criticized as running counter to established rules of statutory construction.[7] It must be pointed out that the decision is controlling law only in the geographical area covered by the Third Circuit Court of Appeals (Delaware, New Jersey, Pennsylvania and the Virgin Islands), and it is doubtful whether the case will be followed by the other circuit courts or by the tax courts. It is advisable for taxpayers in all other parts of the country to limit their deductions for premiums paid for accident and health insurance to those paid for medical expense coverage since in all probability any deduction for premiums expended for disability coverage will be disallowed by the Internal Revenue Service despite the *Heard* decision.

It can thus be seen that the *Heard* case for practical purposes will have little effect on the deduc-

tibility of premiums paid by California Medical Association members insured under the C.M.A. disability insurance policy. This insurance provides benefits only in event of the loss of life, limb, sight or time and contains no provision for reimbursement of medical or hospital expenses. The premiums paid for such insurance are thus not deductible as a medical expense under the rulings of the Internal Revenue Service that are still in full force and effect.

REFERENCES

1. 269 F. 2d 911.
2. Rev. Rul. 19, 1953—1 C. B. 59; Rev. Rul. 55-261, 1955—1 C. B. 307.
3. *D. C. Heard*, 30 T.C. 1093.
4. Rev. Rul. 55-331, 1955—1 C. B. 271.
5. Section 213 (e) Internal Revenue Code of 1954 (3).
6. Rev. Rul. 59-393, I.R.B. 1959-50, 52.
7. See discussion of this case in *Tax Barometer*, Vol. 16, Sec. 1652.

John Green's Rough Road To Smooth Sailing

The difficulties that beset Dr. John W. Green, of Vallejo, in getting home from the American Medical Association's December meeting in Dallas were a far cry from the serene life that so able a worker in the vineyard might reasonably expect upon retirement from years of service in the House of Delegates. However, not long afterward, a more suitable reward for the elder statesman was provided by his own townspeople. More later about the tribute of his neighbors, but first Dr. Green's own report of his memorable return from Dallas (taken from a letter he wrote to his long-time colleague, Dr. Donald Cass of Los Angeles) :

December 7, 1959

Dear Don:

I had a bad time getting home from Dallas. You were very smart to go by rail. Our plane was grounded at Ontario due to fog, 60 miles by bus to Los Angeles International. I missed my connection with the United Air and took a coach to Burbank where I was a standby until 2:45 a.m. I arrived in San Francisco at 4:00 a.m. and got Ann [Mrs. Green] out of bed at my daughter's home. They waited for me until 2:30 a.m. and gave up.

Ann dressed and came down to the airport at 5:00 a.m. After a light breakfast we went to bed in Vallejo at 7:00 a.m. So ended my term of fourteen years in the "House."

Ann sends her regards.

Cordially,
PETE

P.S.—My luggage was lost in the shuffle but came by Greyhound Saturday afternoon.

And now, for a report of a more appropriate beginning for Dr. Green's contemplative years, we have a clipping from the *Vallejo Times-Herald:*

Dr. John W. Green, prominent Vallejo physician and surgeon who served as president of the California State Medical Association in 1953-54, was honored by the Vallejo Rotary Club yesterday for his contributions to organized medicine in California and the United States.

The guest speaker at the club's regular meeting in the Casa de Vallejo Hotel was Dr. Warren L. Bostick of San Rafael, a pathologist and councilor for the State Medical Association.

Doctor Bostick's subject was "John Green's California Medicine."

Also paying tribute to Doctor Green were Dr. H. B. Perkins and Dr. D. C. Marchand, both of Vallejo, who related anecdotes and incidents in the life of the Vallejo eye, ear, nose and throat specialist.

NEWS & NOTES

NATIONAL • STATE • COUNTY

FRESNO

Dr. Robb Smith, of Orange Cove, has been elected president of the **Central California Blood Bank** for 1960, succeeding Dr. John Murray of Fresno.

The bank serves 41 hospitals in Madera, Merced, Kings, Tulare and Fresno counties.

Other officers elected were Dr. J. J. McNearney, Tulare, vice president; Walter H. Stammer, Fresno, secretary, and Dr. Zdenek Fluss of Merced, treasurer.

LOS ANGELES

The 28th Annual Alumni **Postgraduate Convention of the College of Medical Evangelists** is scheduled for February 28 to March 3 in Los Angeles. The first two days of the five-day meeting will be at the College (Feb. 28, 29). The next three at the Ambassador Hotel (March 1-3) will feature six guest lecturers plus a prominent Los Angeles attorney and a number of faculty members from the University of Southern California, University of California at Los Angeles, and College of Medical Evangelists schools of medicine.

The first two days will consist of a series of refresher courses to be held in classrooms and laboratories on CME's Los Angeles campus. Physicians registered for these courses will receive Category I credit from the American Academy of General Practice.

* * *

Dr. Leo Rangell, a former president of the Southern California Psychiatric Society, was elected president-elect of the American Psychoanalytic Association at its recent annual meeting in New York City.

* * *

All members of the California Medical Association and their wives are invited to attend a **memorial mass** for our members who died during 1959, to be offered by His Eminence, J. Francis Cardinal McIntyre of Los Angeles. The mass will be held at St. Basil's Church, 658 South Harvard Boulevard at 8:00 a.m. on Monday, February 22. St. Basil's Church is located four blocks west of the Ambassador Hotel, on the corner of Wilshire and South Harvard Boulevards.

* * *

A number of ancillary organizations have scheduled meetings to be held in Los Angeles during the time of the Annual Session of the California Medical Association, as follows:

Southern California Chapter of the American Academy of Pediatrics, annual reception and dinner meeting, Wednesday, February 24, Ambassador Hotel, West Venetian Room. Reception at 6:30 p.m., dinner at 7:00 p.m. For information and reservations: Mrs. Jane Hausken, 600 D South Oak Knoll, Pasadena. Reservations, $6.50.

The California Academy of Preventive Medicine reception and dinner Tuesday, February 23, Ambassador Hotel, West Venetian Room, 6:30 p.m. For reservations and further information: G. A. Heidbreder, M.D., Secretary-Treasurer, California Academy of Preventive Medicine, 241 North Figueroa Street, Los Angeles 12.

California Chapter of the American College of Chest Physicians meeting and reception, Saturday, February 20, Embassy Room, meeting, 9:00 a.m. to 5:00 p.m.; reception, Regency Room, 5:00 to 7:00 p.m.

Conference of Local County Health Officers and County Society Representatives, Tuesday, February 23, West Venetian Room, 2:00 p.m.

* * *

There will be a meeting of the **Harvard Medical Alumni Association of Southern California** at the California Club, 538 South Flower, Los Angeles, at 6:30 p.m., Friday, March 11, to entertain Dr. Rolf Lium, president of Harvard Medical Alumni Association. Harvard medical alumni wishing to attend may obtain information from Dr. Lowell F. Bushnell, 1321 North Vermont Avenue, Los Angeles.

SAN FRANCISCO

A yearly **Low-Beer Lectureship in Radiation Therapy** has been established at the University of California Medical Center in honor of the late Dr. Bertram V. A. Low-Beer, professor of radiology until his death in 1955.

The purpose of this Lectureship is to bring distinguished visitors to the campus for a period of about one week, during which time the main address will be given.

The first Low-Beer Memorial Lecture will be held in the Auditorium, Medical Sciences Building, University of California Medical Center, San Francisco, on Thursday evening, March 3, at 8:00 p.m. Dr. Manuel Lederman, deputy-director of the Royal Marsden Hospital, London, will speak on "The Place of Radiation Therapy in the Treatment of Cancer of the Larynx."

GENERAL

Dr. John W. Cline, San Francisco, was elected chairman of the **Cancer Advisory Council** to the California State Department of Public Health at the organizational meeting of this recently appointed group. Dr. John Ross, Los Angeles, was elected vice chairman. The Council, made up of 15 members, nine of whom are physicians, was named in December by Governor Edmund Brown to advise in the enforcement of California's new anti-quackery law.

* * *

The American College of Surgeons will hold a section meeting in Portland, Oregon, March 28-March 30. The program will include scientific reports on topics of current concern such as five to ten-year results of radical masectomy for carcinoma, common ski injuries, treatment of hernia, injuries of the eyelids and globe, and duodenal ulcer.

* * *

The Eighth Congress of the **Pan-Pacific Surgical Association** will be held in Honolulu, Hawaii, September 27 through October 5 in 1960.

Further information and brochures may be obtained by writing to Dr. F. J. Pinkerton, director general of the Pan-Pacific Surgical Association, Suite 230, Alexander Young Building, Honolulu 13, Hawaii.

* * *

Dr. John Paul North, Dallas, Texas, will become the director of the **American College of Surgeons,** effective January 31, 1961, it was announced recently by Dr. I. S. Ravdin, chairman of the board of regents. He will succeed Dr. Paul R. Hawley, the College's Director.

POSTGRADUATE EDUCATION NOTICES

THIS BULLETIN of the dates of postgraduate education programs and the meetings of various medical organizations in California is supplied by the Committee on Postgraduate Activities of the California Medical Association. In order that they may be listed here, please send communications relating to your future medical or surgical programs to: Mrs. Margaret H. Griffith, Director, Postgraduate Activities, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5.

UNIVERSITY OF CALIFORNIA AT LOS ANGELES

CLINICAL POSTGRADUATE PROGRAM—MEXICO CITY, IN COOPERATION WITH THE NATIONAL SCHOOL OF MEDICINE, MEXICO CITY. Anesthesiology, Gastroenterology, Dermatology, Cardiology, Pediatrics and General Surgery. Feb. 25 through March 5, 1960.

Clinical Traineeships — Anesthesia, Dermatology and Pediatric Cardiology. Dates by arrangement. Minimum period—two weeks. Fee: Two weeks, $150.00; four weeks, $250.00.

Ophthalmic Plastic Surgery. Friday and Saturday, March 11 and 12. Twelve hours. Fee: $40.00 includes lunch.

Geriatrics in Clinical Practice. Saturday and Sunday, March 19 and 20. 12 hours. Fee: $40.00.

Emotional Problems in Pediatric Practice. Friday through Sunday, April 8 through 10. University of California Residential Conference Center, Lake Arrowhead. 13 hours. Fee: $110.00, including room and meals.

Inhalation Therapy. April.†

Postgraduate Medical Symposium. Grossmount Hospital, San Diego. Saturday and Sunday, April 30 and May 1. Twelve hours. Fee: $25.00.

Management of Medical Emergencies. Friday and Saturday, May 6 and 7. 12 hours.*

Low Back Pain. May.†

Proctology. Wednesday, June 8. Six hours.*

General Pediatrics. Sunday through Wednesday, July 17 through 20. Lake Arrowhead, University of California Residential Conference Center. Fifteen hours.*

Advance Seminar in Internal Medicine. Wednesday through Sunday, July 20 through 24. University of California Residential Conference Center, Lake Arrowhead. Eighteen hours.*

Dermatology in Office Practice. Monday and Tuesday, July 25 and 26. Twelve hours.*

Seminars in Dermatology (for Dermatologists). Wednesday through Saturday, July 27 through 30. University of California Residential Conference Center, Lake Arrowhead. Fifteen hours.*

Anesthesiology. Wednesday, Thursday and Friday, August 3, 4 and 5. Eighteen hours.*

Arthritis and Rheumatism. Wednesday, August 24.‡

The Multiple Injury Patient. Thursday, Friday and Saturday, September 22, 23, and 24. Eighteen hours.*

For Ancillary Personnel

Medical Terminology—Advanced. Tuesdays, February 16 through June 21. Forty-five hours. Fee: $35.00.

Beginning Medical Terminology. Wednesdays, February 17 through June 22. Forty-five hours. Fee: $35.00.

Pathological Physiology in Physical Treatment Procedures. Mondays, February 29 through April 25. Sixteen hours. Fee: $30.00.

Workshop in Practical Tuberculosis Bacteriology. Saturday, March 5. Eight hours. Fee: $5.00.

Contact: Thomas H. Sternberg, M.D., assistant dean for Postgraduate Medical Education, U.C.L.A., Los Angeles 24. BRadshaw 2-8911, Ext. 7114.

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Psychotherapy in Medical Practice. Wednesdays, February 17 through May 4. Sixty hours. Fee: $25.00.

Course for Physicians in General Practice (Mt. Zion Hospital, San Francisco). Monday through Saturday, March 7 through 12. Thirty-eight hours. Fee: $85.00.

Patients As People—Evening Seminars on the Psychological Aspects of Medical Practice. Thursdays, March 10-May 26. Twenty-four hours. Fee: $5.00.

Diagnostic Radiology. Wednesday through Sunday, March 16 through 20. Thirty-five hours. Fee: $80.00.

Medical Evening Series (Eden Hospital, Castro Valley). Tuesdays, March 22 to May 10. Sixteen hours. Fee: $35.00.

Physiological Basis for Diagnosis and Treatment. An Official Course of the American Physiological Society. Wednesday through Sunday, March 30 through April 3. Thirty-five hours. Fee: $90.00 or $25.00 per day.

Symposium on Pediatric Surgery (Children's Hospital). Saturday, April 23. Seven hours. Fee: $12.50.

A Course on General Surgery. Monday to Friday, April 25 to 29. Thirty-five hours.*

A Course on Urology. Thursday and Friday, May 5 and 6. Fourteen hours.*

A Course on Ear, Nose, Throat. Thursday to Saturday, May 12 to 14. Twenty-one hours.*

Proctology. Thursday and Friday, May 19 and 20. Fourteen hours.*

Advances in Surgical Anatomy, Normal Anatomy and Histology of the Eye. Thursday to Saturday, June 2 to 4. Twenty-one hours.*

A Course on the Foot. Thursday to Saturday, June 9 to 11. Twenty-one hours.*

A Course in Industrial Medicine. Wednesday to Friday, June 22 to 24. Twenty-one hours.*

A Course on New Drugs. Thursday to Saturday, July 14 to 16. Twenty-one hours.*

Obstetrics and Gynecology. Thursday to Saturday, September 15 to 17. Twenty-one hours.*

Fundamental Practices of Radioactivity and the Diagnostic and Therapeutic Uses of Radioisotopes. Two or three month course limited to one enrollee per month. Fee: $350.00.

*Fees to be announced.
†Dates, fees and hours to be announced.
‡Hours and fees to be announced.

For Ancillary Personnel

Advances in Psychiatric Nursing: Section I.—All registered nurses. Wednesday, February 24 through April 13. Sixteen hours. Fee: $25.00.

Advances in Psychiatric Nursing: Section II.—Nurses who have had training and practice in Psychiatric Nursing. Thursdays, February 25 through April 14. Sixteen hours. Fee: $25.00.

Practical Cytology. Saturday and Sunday, February 27 and 28. Eleven hours. Fee: $15.00.

Rehabilitation Nursing. Monday through Friday, April 11 through 29. Fairmont Hospital, San Leandro.*

Evening Lectures on Pharmacy. Mondays, April 18 to May 23.*

Nursing Care of Mothers and Children. Tuesdays, April 19 through June 7, Highland Hospital, Oakland. Sixteen hours. Fee: $25.00.

Nursing Care of Medical-Surgical Patients. Thursdays, April 21 through June 9. Highland Hospital, Oakland. Sixteen hours. Fee: $25.00.

Nursing and People. Monday to Friday, May 2 to 13. Fee: $30.00.

Continuing Education Conference. Monday through Friday, June 13 through 17.*

Integration of Psychiatric Principles in the Total Curriculum. Tuesday to Friday, July 5 to August 12.*

Supervision. Tuesday through Friday, September 6 through 16.*

Administration of Nursing Care. Tuesdays, September 13 through December 13.*

Nutritional Aspects of Nursing Care. Wednesdays, September 21 through November 9.*

Contact: Seymour M. Farber, M.D., assistant dean, Department of Continuing Medical Education, University of California Medical Center, San Francisco 22. MOntrose 4-3600, Ext. 665.

STANFORD UNIVERSITY SCHOOL OF MEDICINE

Morning Clinical Conferences, each Monday. *Contact:* D. H. Pischel, M.D., Professor, Division of Ophthalmology, Stanford University School of Medicine, Stanford Hospital, Clay and Webster Streets, San Francisco.

For information contact: Dean, Stanford University School of Medicine, 300 Pasteur Drive, Palo Alto.

UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES

Cardiac Resuscitation. Sponsored by the Los Angeles County Heart Association each Wednesday throughout the year, 4 to 6 p.m. USC Medical Research Building, Room 211, 2025 Zonal Avenue. Residents and interns of Los Angeles County, and all armed forces medical personnel admitted without fee. Tuition for all other physicians: $30.00. (Each session all-inclusive.)

Basic Home Course in Electrocardiography. One year postgraduate series, electrocardiogram interpretation by mail. Physicians may register at any time and receive all 52 issues. Fifty-two weeks. Fee: $100.00.

Advance Home Course in Electrocardiography. One year postgraduate series, electrocardiogram interpretation by mail. Fifty-two issues: $85.00. Physicians may register at any time.

Dermatology Clinic, One-Day Symposium. Thursday, March 24. Seven hours. Fee: $25.00.

Symposium on Hypertension. Friday, April 1. Seven hours. Fee: $7.50.

Funduscopy in Internal Medicine. Every other Tuesday, April 5 through June 14. Twelve hours. Fee: $37.50.

Ward Walks in Rare Diseases. Thursdays, April 14 through June 16. Twenty hours. Fee: $100.00.

Practical Diagnosis and Management of Cardiovascular Diseases. Dates to be announced. Twenty-one hours. Fee: $75.00.

Contact: Phil R. Manning, M.D., associate dean and director, Postgraduate Division, University of Southern California School of Medicine, 2025 Zonal Avenue, Los Angeles 33. CApital 5-1511.

COLLEGE OF MEDICAL EVANGELISTS

CLINICAL TRAINEESHIPS available in all clinical departments by arrangement with the Postgraduate Division and the chairman of the department or departments involved. Eighty hours minimum. Fee: As arranged.

Diseases of the Chest: Two and four-week Traineeships in cooperation with the Los Angeles County Hospital. Dates as arranged.

Anesthesia. Monday through Friday. Dates as arranged. Six months. Fee: $350.

SPECIAL SKILLS available in the clinical departments, usually with a maximum of two or three students.

Surgical Anatomy: Head and Neck, April 20 through June 1, 63 hours. Fee: $75.00.

Surgical Anatomy: Head and Neck, April 20 through June 1. Twenty-four hours. Fee: $35.00.

ALUMNI POSTGRADUATE CONVENTION, held annually in cooperation with the Alumni Association of the School of Medicine. Refresher Courses, Sunday and Monday, February 28 and 29, at White Memorial Hospital, 1720 Brooklyn Avenue. Six hours each day. Fee: $20.00 each day. Scientific Assembly, Tuesday through Thursday, March 1 through 3, at the Ambassador Hotel. Twenty-four hours. Fee: $15.00. *Contact:* Walter Crawford, executive secretary, 316 N. Bailey Street, Los Angeles 33, ANgelus 2-2173.

TRAUMATOLOGY, a complete review including fractures and dislocations, soft tissue injuries, as well as complications involving the 3 cavities: Calvarium, thorax and abdomen. Limited to 15 candidates. Includes basic sciences, lectures, clinical demonstrations. Monday through Friday, March 7 through 11. Thirty-six hours. Fee: $100.00.

TROPICAL PUBLIC HEALTH: Causes, treatment and management of diseases found in the warm climates. For physicians who plan to serve abroad and other ancillary personnel. Monday through Friday, April 1 through May 30. Fee: $65.

*Fees to be announced.

JOINT MANIPULATION. Monday through Friday, 8:00 to 12:00, dates to be arranged. Twenty hours. Fee: $75.00.

For information contact: G. E. Norwood, M.D., assistant dean and chairman, Division of Postgraduate Medicine, College of Medical Evangelists, 1720 Brooklyn Ave., Los Angeles 33. ANgelus 9-7241, Ext. 214.

CALIFORNIA MEDICAL ASSOCIATION POSTGRADUATE COURSES

ANNUAL SESSION POSTGRADUATE COURSES

Infectious Diseases. 9 hours. Sunday, Monday and Tuesday, February 21, 22 and 23, 9:00 to 12:00 noon. February 21 at Chapman Park Hotel, February 22 and 23 at Ambassador Hotel, Los Angeles. Program by University of California School of Medicine, Los Angeles.

Clinical Endocrinology. 9 hours. Sunday, Monday and Tuesday, February 21, 22 and 23, 9 to 12 noon. February 21 at Los Angeles County Hospital, February 22 and 23 at Ambassador Hotel. Program by University of Southern California School of Medicine.

Minor Surgery. 9 hours. Sunday, Monday and Tuesday, February 21, 22 and 23, 9 to 12 noon. All sessions at White Memorial Hospital, Los Angeles. Program by College of Medical Evangelists.

POSTGRADUATE INSTITUTES—1960
(Tenth Anniversary Year)

North Coast Counties in cooperation with College of Medical Evangelists, March 31 and April 1. Flamingo Hotel, Santa Rosa. *Chairman:* H. Ward Wick, M.D., 858 Fourth Street, Santa Rosa.

Southern Counties in cooperation with Stanford University School of Medicine, April 21 and 22. Palm Springs Riviera. *Chairman:* Robert M. Zweig, M.D., 7004 Magnolia, Riverside.

San Joaquin Valley Counties in cooperation with University of Southern California School of Medicine, April 28 and 29. Ahwahnee Hotel, Yosemite. *Chairman:* Campbell H. Covington, M.D., 2057 High Street, Selma.

Sacramento Valley Counties in cooperation with UCLA School of Medicine, July 1 and 2. Tahoe Tavern, Lake Tahoe. *Chairman:* Herbert W. Korngold, M.D., 1217 30th Street, Sacramento.

Contact: One of the chairmen listed above, or Postgraduate Activities Office, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5.

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AUDIO-DIGEST FOUNDATION, a nonprofit subsidiary of the C.M.A., offers (on a subscription basis) a series of six different hour-long tape recordings covering general practice, surgery, internal medicine, obstetrics and gynecology, pediatrics and anesthesiology. Designed to keep physicians posted on what is new and important in their respective fields, these programs survey current national and international literature of interest and contain selected highlights of on-the-spot recordings of national scientific meetings, panel discussions, symposia, and individual lectures. For information contact Mr. Claron L. Oakley, Editor, 1919 Wilshire Blvd., Los Angeles 57, HUbbard 3-3451.

Medical Dates Bulletin

FEBRUARY MEETINGS

CALIFORNIA MEDICAL ASSOCIATION Annual Meeting, February 21 through 24, Ambassador Hotel, Los Angeles. *Contact:* John Hunton, executive secretary, 693 Sutter Street, San Francisco 2; or Ed Clancy, director of Public Relations, 2975 Wilshire Blvd., Los Angeles 5.

PACIFIC COAST SURGICAL ASSOCIATION Annual Meeting. February 21 through 24. Palm Springs. *Contact:* Carleton Mathewson, M.D., professor of surgery, Stanford Hospital, San Francisco.

MARCH MEETINGS

SOUTHWESTERN PEDIATRIC SOCIETY Spring Lecture Series, March 1 and 2, Statler Hotel, Los Angeles. *Contact:* Wendell Severy, M.D., program chairman, 11633 San Vicente Blvd., Los Angeles 49.

ANESTHESIA SECTION, LOS ANGELES COUNTY MEDICAL ASSOCIATION, Fifth Annual Course in Anesthesiology for Physicians. March 12 and 13. 1925 Wilshire Blvd., Los Angeles. *Contact:* Thomas W. McIntosh, M.D., chairman, 686 East Union St., Pasadena.

PIONEERS MEMORIAL HOSPITAL MEDICAL STAFF in association with the University of Oklahoma School of Medicine, Tenth Annual Postgraduate Assembly. March 18 and 19. Pioneers Memorial Hospital, Brawley. *Contact:* George C. Holleran, M.D., program chairman, P. O. Box 159, Brawley, Calif.

SAINT JOSEPH HOSPITAL, BURBANK, Annual Medical Assembly. March 25 and 26, 9 to 5 p.m. Saint Joseph Hospital Auditorium, 501 S. Buena Vista, Burbank. *Contact:* Walter Gelb, Public Relations, St. Joseph Hospital, 501 S. Buena Vista, Burbank, THornwall 8-5531, Ext. 305.

AMERICAN SOCIETY OF MAXILLOFACIAL SURGEONS, Ambassador Hotel, Los Angeles. March 27 through 31. *Contact:* Arthur E. Smith, M.D., D.D.S., 1930 Wilshire Blvd., Los Angeles 57.

INTERMOUNTAIN PEDIATRIC SOCIETY, Stardust Hotel, Las Vegas, Nevada. March 28 and 29. *Contact:* Joseph R. Newton, M.D., publicity chairman, 2000 S. 9th East, Salt Lake City, Utah.

SOUTHWESTERN SURGICAL CONGRESS. March 28 through 31, Riviera Hotel, Las Vegas, Nevada. *Contact:* Miss Mary O'Leary, executive secretary, 1213 Medical Arts Building, Oklahoma City, Oklahoma.

NEUROSURGICAL SOCIETY OF AMERICA. March 30 through April 2, Del Monte Lodge, Del Monte. *Contact:* Raymond K. Thompson, M.D., secretary, 803 Cathedral Street, Baltimore 1.

APRIL MEETINGS

AMERICAN SOCIETY OF INTERNAL MEDICINE. April 1 through 3. Palace Hotel, San Francisco. *Contact:* Mr. Robert L. Richards, executive director, 350 Post Street, San Francisco 8.

AMERICAN COLLEGE OF PHYSICIANS Annual Meeting, April 4 through 9. Civic Auditorium, San Francisco. *Contact:* Edward C. Rosenow, Jr., M.D., executive director, 4200 Pine Street, Philadelphia 4.

Harvey Cushing Society. Fairmont Hotel, San Francisco. April 13 through 17. *Contact:* Edmund J. Morrissey, M.D., 450 Sutter Street, San Francisco 8.

California Medical Assistants Association Annual Convention. April 23 and 24. Claremont Hotel, Berkeley. *Contact:* Mrs. Anne Reece, president CMAA, 1837 So. Indiana St., Porterville, California.

Valley Children's Hospital Spring Clinics. April 28 through 30. Roosevelt High School auditorium, Fresno. *Contact:* Valley Children's Hospital, Shields and Millbrook Avenues, Fresno.

MAY MEETINGS

Pan American Medical Association Congress. May 2 to 11. Mexico City. *Contact:* Joseph J. Eller, M.D., director general, 745 Fifth Avenue, New York, N. Y.

Memorial Hospital of Long Beach Medical Staff 2nd Annual Scientific Symposium "New Horizons in Medicine," to be held in conjunction with the formal opening of the new 400-bed Memorial Hospital of Long Beach. May 4. *Contact:* George X. Trimble, M.D., director of medical education, Seaside Memorial Hospital, 1401 Chestnut Avenue, Long Beach 13.

Student American Medical Association, Statler-Hilton Hotel, Los Angeles, May 5 through 8. *Contact:* Mr. R. F. Staudacher, executive director, 430 N. Michigan, Chicago 11.

Nevada Academy of General Practice 1960 Annual Assembly. May 12 through 14. Riverside Hotel, Reno, Nevada. Scientific program by University of California School of Medicine. *Contact:* Roy M. Peters, M.D., general chairman, 475 So. Arlington, Reno, Nevada.

Hawaii Medical Association Annual Meeting. May 12 through 15. *Contact:* Miss Lee McCaslin, executive secretary, 510 S. Beretania, Honolulu 13.

National Tuberculosis Association—American Trudeau Society Annual Meeting. May 16 through 19. Statler Hilton and Biltmore Hotels, Los Angeles. *Contact:* Mr. Sherman Asche, general chairman, Annual Meeting Committee, P. O. Box 4037, Santa Barbara.

American College of Nutrition 1960 Annual Convention. May 20 through 22. Huntington Sheraton Hotel, Pasadena. *Contact:* Donald B. Haynie, executive secretary, 10651 West Pico Blvd., Los Angeles 64.

California Heart Association Annual Meeting and Scientific Session. May 23 through 25. Claremont Hotel, Berkeley. *Contact:* J. Keith Thwaites, executive director, 1428 Bush Street, San Francisco 9.

SUMMER AND FALL 1960 MEETINGS

Gerontological Society, Inc., Mark Hopkins Hotel, San Francisco. August 7 through 12. *Contact:* Mrs. Marjorie Adler, administrative secretary, 660 S. Kingshighway Blvd., St. Louis 10.

Reno Surgical Society 10th Annual Conference. August 18, 19 and 20. The Mapes Hotel, Reno. *Contact:* Harry B. Gilbert, M.D., 275 Hill Street, Reno, Nevada.

American Association of Blood Banks, Jack Tar Hotel, San Francisco. August 21 through 26. *Contact:* John B. Alsever, M.D., secretary, 1211 W. Washington St., Phoenix, Arizona.

American Hospital Association, Civic Auditorium, San Francisco. August 27 through September 1. *Contact:* Mr. Maurice J. Norby, assistant director, 18 E. Division St., Chicago.

Nevada State Medical Association Annual Meeting. September 7 through 10. Stardust Hotel, Las Vegas. *Contact:* Nelson B. Neff, executive secretary, P. O. Box 2790, Reno, Nevada.

California Society of Internal Medicine Annual Meeting, Yosemite. September 23, 24 and 25. *Contact:* Barbara E. Oulton, executive secretary, 350 Post St., San Francisco 8.

Pan-Pacific Surgical Association 8th Intensive Surgical Congress, embracing all Surgical Specialties. September 28 through October 5. Honolulu, Hawaii. *Contact:* F. J. Pinkerton, M.D., director general, Suite 230, Alexander Young Building, Honolulu 13.

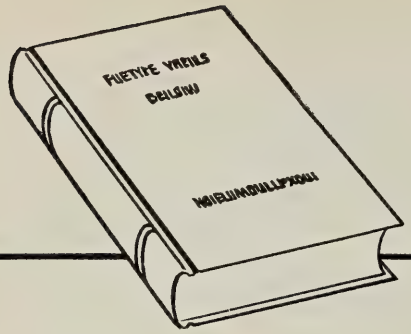
American Association for the Surgery of Trauma. Coronado Hotel, San Diego. October 5 through 7. *Contact:* William T. Fitts, Jr., M.D., secretary, 3400 Spruce St., Philadelphia 4.

Western Industrial Medical Association combined Meeting with 4th Western Industrial Health Conference. October 7 through 9. Jack Tar Hotel, San Francisco. *Contact:* Verne G. Ghormley, M.D., president, 3032 Tulare Street, Fresno 21.

American College of Surgeons, Clinical Congress, San Francisco. October 10 to 14. *Contact:* H. P. Saunders, M.D., 40 E. Erie St., Chicago 11.

American School Health Association, San Francisco. October 30 through November 4. *Contact:* A. O. DeWeese, M.D., executive secretary, 515 E. Main St., Kent, Ohio.

American Public Health Association, San Francisco. October 31 through November 4. *Contact:* Berwyn F. Mattison, M.D., executive director, 1790 Broadway, New York 19.



THE PHYSICIAN'S *Bookshelf*

DIFFERENTIAL DIAGNOSIS OF ABDOMINAL PAIN, THE—University of California Medical Extension Series, Los Angeles—Edited by Sherman M. Mellinkoff, M.D., Associate Professor of Medicine, UCLA School of Medicine, Los Angeles. The Blakiston Division, McGraw-Hill Book Company, Inc., New York, 1959. 443 pages, $9.00.

Two internists, a surgeon and a urologist have joined forces to compose an excellent postgraduate symposium on abdominal pain for the practitioner. Thorough reading of this small volume can substitute for the postgraduate course that the practitioner might have taken at the University of California School of Medicine at Los Angeles. And by using it he may polish up on his medical school habits and jargon as well as on his diagnostic ability.

This volume catalogs systematically and briefly the known causes of abdominal pain and describes or makes available by reference the means by which these can be recognized and differentiated. The rather novel approach of having two internists combine with a surgeon and urologist to present such a text is designed to avoid overemphasis on too frequent surgery as well as to emphasize surgical treatment when it is indicated.

This is a good postgraduate symposium and we recommend it to practicing physicians.

EDGAR WAYBURN, M.D.

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PERIPHERAL VASCULAR DISEASES: AN OBJECTIVE APPROACH — Travis Winsor, M.D., F.A.C.P.; Assistant Clinical Professor of Medicine, University of Southern California School of Medicine, Los Angeles; Director, Heart Research Foundation, Los Angeles; Staff Member, The Hospital of the Good Samaritan, Los Angeles; Staff Member, St. Vincent's Hospital, Los Angeles; Staff Member, Los Angeles County General Hospital. With a foreword by Burrell O. Raulston, M.D., Dean Emeritus, University of Southern California, School of Medicine, Los Angeles, California. Charles C. Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois, 1959. 845 pages, $16.50.

A gradual evolution of the electrocardiograph during the early decades of the twentieth century has brought to clinical cardiology an exacting tool for measurements of cardiac function. Similarly, in the last twenty years, the electronic devices of the physiology laboratory have been perfected and have been made practical for the measurement of vascular and sympathetic nerve function, as related to clinical angiology. Doctor Winsor has long been a leader in these technicological areas, as well as in the field of vascular disease.

In his book, Peripheral Vascular Diseases, Winsor presents through these improved instruments an objective approach to the understanding and treatment of patients with peripheral vascular disease. There is adequate background coverage of the anatomy, physiology and dynamics of circulation. There is an accurate description of the physiologic tools with which Doctor Winsor is so familiar. These include physiologic transducers, segmental and digital plethysmography, rheoplethysmography, skin thermometry, capillary and scleral microscopy, oscillometry, ergography, vibrometry, as well as physical examination, arteriography and phlebography.

Drug therapy has been brought up to date and objective studies of the relation of the modern drug to results in various diseases are carefully considered, including anticoagulants and vasodilators. The use of physical methods of therapy, such as postural exercises, oscillating beds and cradles, are well presented. Doctor Winsor presents a careful and well thought out classification of peripheral vascular disease and then proceeds to consider each of the classes in a systematic, clear, brief manner. The illustrations are profuse and simple. In each case the illustrator has brought together the illustration as a summation of the printed matter, so that one can easily recall the detailed subject matter. It is as if one were in an exhibition booth with a constantly changing exhibit. This is a book which should be of value, not only to the general practitioner and the internist, but also to the researcher who may find herein tools for clinical investigation.

* * * R. S. GILFILLAN, M.D.

A GUIDE TO ANTIBIOTIC THERAPY—Henry Welch, Ph.D. Medical Encyclopedia, Inc., 30 East 60th Street, New York 22, N. Y., 1959. 69 pages, $3.00.

The purpose of this book is rather obscure. According to the introductory statement "an attempt has been made to condense for the physician's ready reference the important information concerning each of 31 antibiotics." Yet the book consists of a series of tables which list, for each drug, the susceptibility, *in vitro*, of large numbers of microorganisms, without reference to the potential usefulness of the drug. Thus two half pages of yellow-white striped printing, listing some 50 names of micro-organisms, are dedicated to vancomycin, although this drug should never be considered in anything but staphylococcal infections. This might simply indicate a ludicrous waste of paper and printing, but it actually obscures, rather than clarifies information for the physician. In addition there is evident a complete lack of discrimination. Carbomycin is described on half a page for various hypothetical uses, although this drug has been virtually withdrawn from the market some years ago because it was the single poorest member of the erythromycin group of drugs, widely known as the "drug in desperate search for a disease." Yet no mention is made that this drug belongs to the erythromycin group.

Chlortetracycline (aureomycin) capsules are described on a whole page, without a single statement that this drug is a low-ranking member of the tetracycline group and should probably be used very rarely, if ever. The book also contains many factual errors: e.g., the average dose for adults of chloramphenicol capsules is stated to be 4 grams daily!

In the opinion of this reviewer most physicians would do well to avoid contact with this publication.

NAVY SURGEON—Rear Admiral Herbert Lamont Pugh (MC, Ret.). J. B. Lippincott Company, Philadelphia, 1959. 459 pages, $5.00.

The autobiography of Rear Admiral Herbert Lamont Pugh (MC, Ret.) is a rather extensive tome entitled Navy Surgeon. To the average reader, a less faithful recording of the extraneous details of his personal diary would have strengthened the book. However, to all young men contemplating a career in one of the services, it is recommended reading. The story is a faithful and inspiring account of how a young doctor of humble background reached the high office of Surgeon General of the United States Navy and, in so doing, achieved one of the most rewarding and fascinating of life's experiences.

The progenitors of the large Pugh family were God-fearing people of strong character. Attitudes of industry and thrift were as much a part of choice as necessity. From the father was learned the nobility of work and from the mother a reverence for God and the family. Young Lamont's years of training were often periods of hardship and self-sacrifice. The story reflects, however, a sense of dedication and appreciation of opportunity, with which he passed in succession the many milestones of his professional career.

It was the second world war which provided the opportunity for unprecedented advancement. One after the other of top assignments was given to Doctor Pugh. From the position of Chief of the Surgical Service at the Naval Hospital, Pearl Harbor, he was transferred in eight short months to the same position at the Naval Hospital, San Diego. Being the only member of the regular Navy at the time who had been certified through examination by the American Board of Surgery, Commander Pugh found himself in charge of a service having several members of his staff of senior rank. At one time Commander Pugh was the only member of the regular Navy on the San Diego staff of 185 surgeons, or specialists allied to surgery. His consistent habit of always qualifying himself for advancement through examination or elective training, had indeed paid rich dividends.

Both as Deputy Surgeon General and as Surgeon General, Doctor Pugh served a period of eight years in the Bureau of Medicine and Surgery. During that time many creative ideas for advancing the status and prestige of medicine as practiced in the armed services, were put into effect. It is today a fact that in the armed services medical program there are equality of training opportunity and many compensatory advantages to those who choose to serve their country in this way. Lamont Pugh's career is a living testimonial to the rewards which can accrue from this choice.

W. L. Rogers, M.D.
Rear Admiral, MC, USNR

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DIAGNOSIS AND TREATMENT OF MENSTRUAL DISORDERS AND STERILITY—Fourth Edition—S. Leon Israel, M.D., Professor of Gynecology and Obstetrics, Graduate School of Medicine, University of Pennsylvania; Chief Gynecologist, Graduate Hospital; Gynecologist and Obstetrician, Pennsylvania Hospital, Philadelphia. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, 1959. 666 pages, $15.00.

The fourth edition of this successful book appears as the sole effort of the former junior author with the exception of three sections written by collaborators. It is a relatively large volume since it is composed of 31 chapters and covers 666 pages.

Any writer on the subject of menstrual disorders is faced with the problem of how far afield he should go with the discussion of allied subjects such as endocrinology, gynecologic and systemic disease, and infertility. Israel seems to have faced this difficulty by including all of them. The book begins with a consideration of the physiology of the pituitary gland and the ovaries, and turns to a clinical evaluation of puberty, following which we find a description of the normal menstrual cycle, and a chapter is then interposed on the role of androgen in gynecic physiology. The various menstrual disorders are then taken in sequence, but amenorrhea is given special consideration and extensive sections are devoted to its appearance in derangements of the central nervous system, the pituitary gland, the ovaries, and the uterus. The role of the thyroid gland and adrenal cortex in menstrual disorders now receive special attention, and the next four chapters take up the problems of menorrhagia and metrorrhagia. Finally, seven chapters deal with various aspects of sterility, including the male factor, and the concluding section is devoted to recurrent abortion.

The assortment of so many topics and the arrangement adopted by the author at once lead one to suspect that we may be faced with a confused mass of material. There is indeed some irregularity in the assessment of the relative values of some subjects. For instance, in a book on menstrual disorders one would expect more than nine pages of text dealing with the menopause, especially since neoplastic disease is given fifteen pages and includes a discussion of carcinoma in situ of the cervix which has nothing to do with derangements of menstruation and is not even characterized by abnormal bleeding. However, a careful perusal of the book shows that this divergence does not detract from it but in many ways enhances its value. The reason is that it is remarkably well done. Each disorder or disease is given a concise clear description, the diagnostic procedures are well defined, and treatment is presented in a definite usable manner. The author does not have any ax to grind and his approach to the endocrine therapy of menstrual disorders is conservative and sound, while he avoids the regrettable abuses which have characterized this subject since the early days of the ovarian residue pills. Israel is an accomplished writer and the book reads well; we may forgive him for the occasional lapse such as "the midinternally administered estrogen" and "the ferning of the cervical mucus."

This is an excellent and authoritative book, far more complete than its predecessors, and it is certain to appeal to a wider group of practitioners than merely to the specialties implied in the title.

C. Frederic Fluhmann, M.D.

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INTERN'S MANUAL (Cook County Hospital)—Second Edition—Arthur Bernstein, M.D., Assistant Medical Superintendent, Cook County Hospital; Clinical Associate Professor of Medicine, University of Illinois College of Medicine. The Year Book Publishers, Inc., 200 East Illinois Street, Chicago 11, 1959. 308 pages, $3.00.

This little volume essentially outlines methods of diagnosis and treatment of major illnesses as they are cared for at the Cook County Hospital. As the name indicates, the volume is primarily designed for interns at the Institution. The book outlines in a concise way a satisfactory management of most of the major illnesses. In a sense it contains the orders that the interns are to write in particular conditions.

While the book undoubtedly would be most valuable to an intern at the Cook County Hospital, interns at other institutions will also find it valuable, particularily in the early portion of the intern year. The book could also serve as a check list for a practicing physician who might utilize it to be sure that he had not omitted certain aspects of therapy. This sort of volume could be dangerous in that it could give either intern or practicing physician a "cook book" approach to therapy. Nevertheless, as the author plans its use, the book should prove valuable.

GROUP PSYCHOTHERAPY — Theory and Practice — Second Edition—J. W. Klapman, M.D., Consultant, Downey Veterans Hospital, Diplomate Board of Psychiatry and Neurology. Formerly Faculty, Northwestern University Medical School. Grune & Stratton, 381 Fourth Avenue, New York 16, N.Y., 1959. 301 pages, $6.75.

The second of Klapman's *Group Psychotherapy* (the first edition appeared in 1946) is a difficult one to evaluate. This is because, while it presents much that is of practical value and does reveal a sensitivity to the therapeutic needs of patients, the theoretical basis of the book is a confusing hodge-podge ecclecticism. It contains elements of Learning Theory, Kurt Lewin's Field Theory, and Adlerian Ego Psychology, along with halfhearted acceptance of Psychoanalytic Theory.

The author grants the importance of psychoanalytic concepts of transference and resistance and then proceeds to redefine these concepts. An author certainly has a right to accept or reject any concept. However, to state that he accepts a concept, such as transference, and then to proceed to redefine it in such a way as to distort an already established meaning, only serves to confuse the newcomer in the field and to add semantic difficulties to existing problems. The concept of resistance also is so loosely used as to include any expressions of feeling which are not "positive"—as, for example, sibling rivalry in a group is referred to as an expression of "resistance." Frequently Freud is quoted out of context in a manner calculated to denigrate the importance of drives and defenses in group therapy.

The author points up the usefulness of group therapy in clarifying, and correcting distorted patterns of ego functioning, especially as they apply to interpersonal relationships. However, the "ego" the author refers to is conceptualized in terms of Adler, Horney, and Eric Fromm. The role of intrapsychic forces on ego functioning is minimized to the point where the author states that "affects may be the servant of perception rather than the other way around." To discuss ego psychology in 1959 without mentioning anywhere the contributions of Hartmann, Eric Ericson, and Rappaport is a serious shortcoming in a book dealing with current concepts of ego functioning, as they apply to group therapy.

Despite these weaknesses in theoretical orientation the book has value from a pragmatic viewpoint. The division of the book into chapters describing handling of patients with minimal, moderate, and finally with severe states of personality disorganization is a useful approach. The glaring distortions of more commonly accepted concepts of intrapsychic functioning are less apparent in discussions of treatment of moderately and severely disturbed individuals. This is because in such individuals one must focus on ego reintegration, and a suppressive, reeducative type of therapy, rather than an uncovering type, is indicated.

The ideas presented in regard to many technical procedures are discussed in a manner which would stir little controversy among experienced group therapists, and would be of value to the neophyte. These include the choice of patients for various types of groups, suggestions regarding indications and contra-indications, and some discussion regarding typical problems arising in group therapy, such as handling of initial hours, silences, post therapy hour get-together of patients, etc.

It may be of value to compare this book with another recent text on group therapy by Corsini. This author sharply delineates the differences between an analytically oriented approach to group therapy from other approaches, such as a Rogerian "client centered non-directive" approach utilizing actual transcriptions of therapy hours to demonstrate the differences and similarities. Corsini avoids judgments as to the superiority of one technique over the other, but the reader is able to get a clear concept of the various approaches without distortion.

For anyone seriously interested in learning what group therapy has to offer, Klapman's book would be of much greater value after one has first read a text such as Corsini's. Klapman's book does have a good index and a fairly comprehensive bibliography which enhance the value of the book.

MICHAEL ROSOW, M.D.

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DISTURBANCES IN GASTROINTESTINAL MOTILITY—Edited by J. Alfred Rider, M.D., Ph.D., Assistant Professor of Medicine, University of California School of Medicine, San Francisco, California; and Hugo C. Moeller, M.D., Ph.D., Assistant Professor of Medicine, University of California School of Medicine, San Francisco, California. Charles C. Thomas, Publisher, Springfield, Illinois, 1959. 387 pages, $13.00.

This book is the recording of a symposium oriented around the central theme of gastrointestinal motility. A large number of distinguished authors have contributed sections on subjects ranging from the basic physiology of swallowing to the therapy of ulcerative colitis. Some of the clinically important topics covered include the following: The treatment of constipation and diarrhea, gall bladder and biliary tract disease, malabsorption syndromes, infectious diarrhea, diarrhea in the young child, regional enteritis and postgastrectomy syndromes. There are transcripts of stimulating conferences on ulcerative colitis and functional constipation. The book summarizes a great deal of newly acquired information about basic aspects of gastrointestinal physiology and also much wisdom on certain practical aspects of therapy. In the opinion of the reviewer a few of the views expressed on certain controversial subjects, such as biliary dyskinesia (by J. Dudfield Rose) would not be universally accepted. Nevertheless, no one interested in a stimulating reappraisal of this broad subject could fail to enjoy reading this book and important data and references would be made available by having this volume in one's own library.

* * *

A WAY OF LIFE AND SELECTED WRITINGS OF SIR WILLIAM OSLER—An Unabridged and Unaltered Republication of 1951 edition "Selected Writings of Sir William Osler" (Oxford University Press). Paperback edition published by permission of Oxford University Press by Dover Publications, Inc., 180 Varick Street, New York 14, N. Y. 278 pages, paperback, $1.50.

Now that few remain who knew Osler personally there has been a lively revival of interest in his general and historical writings. This takes the form of reprints of Osler's essays, volumes which include selections from his various writings, and even anthologies of quotations. It is interesting to see a reprint of selected writings of Sir William Osler, first collected in 1951, now reprinted by the Dover Publications in an inexpensive but pleasant format which makes possible a wide circulation among medical students and those who cannot afford expensive books.

The collection contains a wide sampling of Sir William's writings: historical essays, talks to students, bibliophilic material and so forth. On looking through the book one finds that these brilliant essays—coruscating with literary allusions—can not only be reread but their pertinence in this mechanistic age becomes even more impressive. Osler, it now seems clear—will occupy a permanent place in English belles lettres.

ARTHUR L. BLOOMFIELD, M.D.

Mental Disturbances Can Begin at Birth

Psychiatric disturbances can occur in babies from the time of birth, according to an article in the *Journal of the American Medical Association.*

"Insufficient attention is given to the observation that infants can have psychiatric disorders," three doctors at Mount Sinai Hospital in New York City reported. "From birth, disturbed behavior may occur. . . ."

Since a baby's range of behavior is limited, they said, such psychiatric disturbances in infancy are more likely to be expressed as bodily complaints.

"Furthermore, evidence is accumulating that emotional trauma in infancy may be of critical significance in the development of later psychiatric disorders," they said. "Early treatment seems to be the keystone to the prevention of later serious disorders."

The doctors described a case in which it was found that an eight-month-old baby's expulsion of food resulted from mental depression.

The baby lost weight and was suffering severe malnutrition because he regurgitated his food within minutes after being fed. On admission to the hospital, he appeared wasted, chronically ill and unhappy.

During the first month in the hospital, the baby was given different regimens, but none had any long-lasting success.

At this point, psychiatric evaluation was requested. The psychiatrists diagnosed the problem as a reaction resulting from "infantile anxiety neurosis with depression."

Doctors interviewed the mother and found her to be depressed. They discovered that the baby's problem developed after the mother ceased to give him any love or attention.

A special nurse was then assigned to the baby to give him constant warmth and attention. After this, the baby gradually ceased to regurgitate and gained weight. He also became more responsive and happy. The mother also was treated through psychiatric interviews.

Two and a half months after he was admitted, the baby was discharged from the hospital. The mother continued to receive psychiatric help, and the baby continued to improve and develop normally.

"This case also demonstrates the need for maternal love, fondling, and attention for the well-being and normal development of an infant," the doctors concluded.

"Psychiatric treatment of an infant must involve the mother as an integral part of the baby. When the mother cannot be involved directly in treatment, a mother-surrogate must be supplied since an infant cannot progress without a mother-child inter-relationship.

"We are attempting to develop a 'mother bank' of volunteers who would be able, under supervision, to act as mother-surrogates when needed."

The authors of the article were Drs. Myron L. Stein, Aaron R. Rausen, and Abram Blau.

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Handbook on Chemical Tests For Intoxication Issued

A handbook on "Chemical Tests for Intoxication" has been published by the American Medical Association.

The manual, prepared by the American Medical Association Committee on Medicolegal problems, reaffirms the American Medical Association's long-standing recommendation that law enforcement agencies adopt chemical tests in all cases of suspected drunk driving.

"It is hoped . . . that all enforcement agencies will adopt chemical tests in all cases of suspected drinking to insure protection of the innocent as well as conviction of the guilty," the booklet said.

". . . chemical tests are invaluable, because, for the first time, they take the matter of the sobriety or drunkenness of the individual from the realm of speculation and reduce it to almost mathematical certainty.

"With the use of these tests, judges and juries no longer have to depend entirely on the opinion of lay witnesses based upon objective symptoms."

The 103-page manual is designed as "a handbook of information which will assure the competent and proper use of the chemical tests."

The manual includes statistics on the role of alcohol in traffic accidents, a description of chemical tests and commercial devices for measuring drunkenness, legal aspects of chemical tests, and suggestions on how to organize a program of chemical tests for intoxication.

It points out that four independent surveys agreed that alcohol is involved in half of the nation's motor vehicle accidents and that the death and injury toll can be materially lessened by eliminating the alcohol factor.

It concludes that a program of chemical testing of suspected drunk drivers "is bound to inspire compliance with the law.

"It puts the police department in the enviable position of being able to tell drivers what is going to be done—and then to be able to do it—with legal and medical backing."

The manual was written by experts in the fields of medicine, law, and traffic safety. It is believed to be the only authoritative handbook on the subject. The manual is available to doctors without charge.

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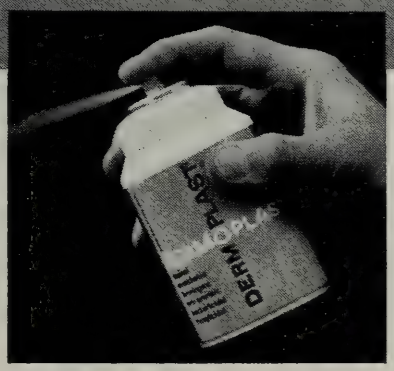
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New Way of Screening Blood Donors Reported

A new method for reducing the incidence of hepatitis resulting from blood transfusions was reported recently.

A "more useful" method of detecting carriers of the liver disease among blood donors was described in the *Journal of the American Medical Association.*

The selection of uninfected donors by blood banks is a difficult problem, one reason being that a person may carry the disease-causing virus although he has no previous history of hepatitis and shows none of its symptoms.

The prevalence of hepatitis carriers among the general population is believed to range from one-half of one per cent to six per cent.

An estimated five million blood transfusions are given in the United States each year and "15,000 to 100,000 cases" of hepatitis can be expected to result, according to the *Journal* article.

"These patients are, as a rule, out of work for an average of six weeks and one to five per cent will die," it said.

In a study conducted at the Medical Service and Blood Bank of the Memorial Center and the Sloan-Kettering Institute for Cancer Research, New York City, doctors used a screening test based on increased activity of certain chemical compounds

(Continued on Page 104)

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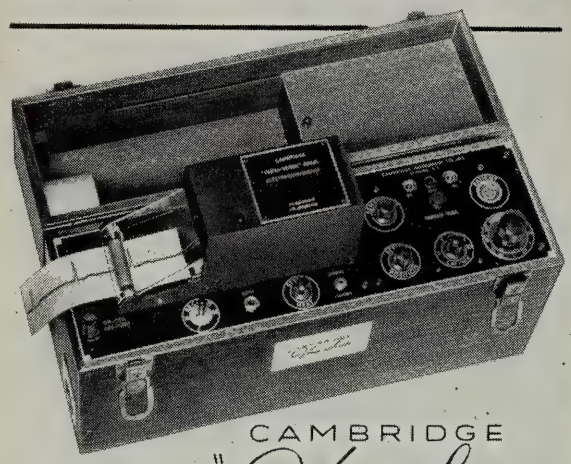
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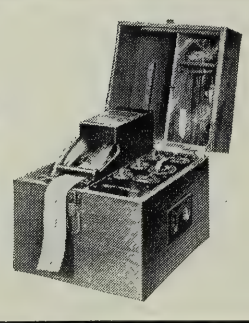
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New Way of Screening Blood Donors Reported

(Continued from Page 82)

(known as SGO-T) in the donors. This activity appeared to be evidence of impending hepatitis.

The researchers found "a significantly higher incidence of viral hepatitis" among recipients of blood with abnormal SGO-T activity than those who received blood with a normal SGO-T level.

They concluded that this test was "a more useful method for detecting silent carriers of hepatitis virus than other tests of liver function previously evaluated. . . ."

However, they said "unpredictable variables do not permit us, on the basis of this study, to draw definite conclusions about the advisability of discarding bloods with abnormal SGO-T activity."

They said they felt that their results did warrant further study to determine whether the method is reliable enough to be instituted as a standard screening measure in all blood banks.

Participating in the study were Drs. Nils U. Bang, Paul Ruegsegger, Allyn B. Ley, and John S. LaDue.

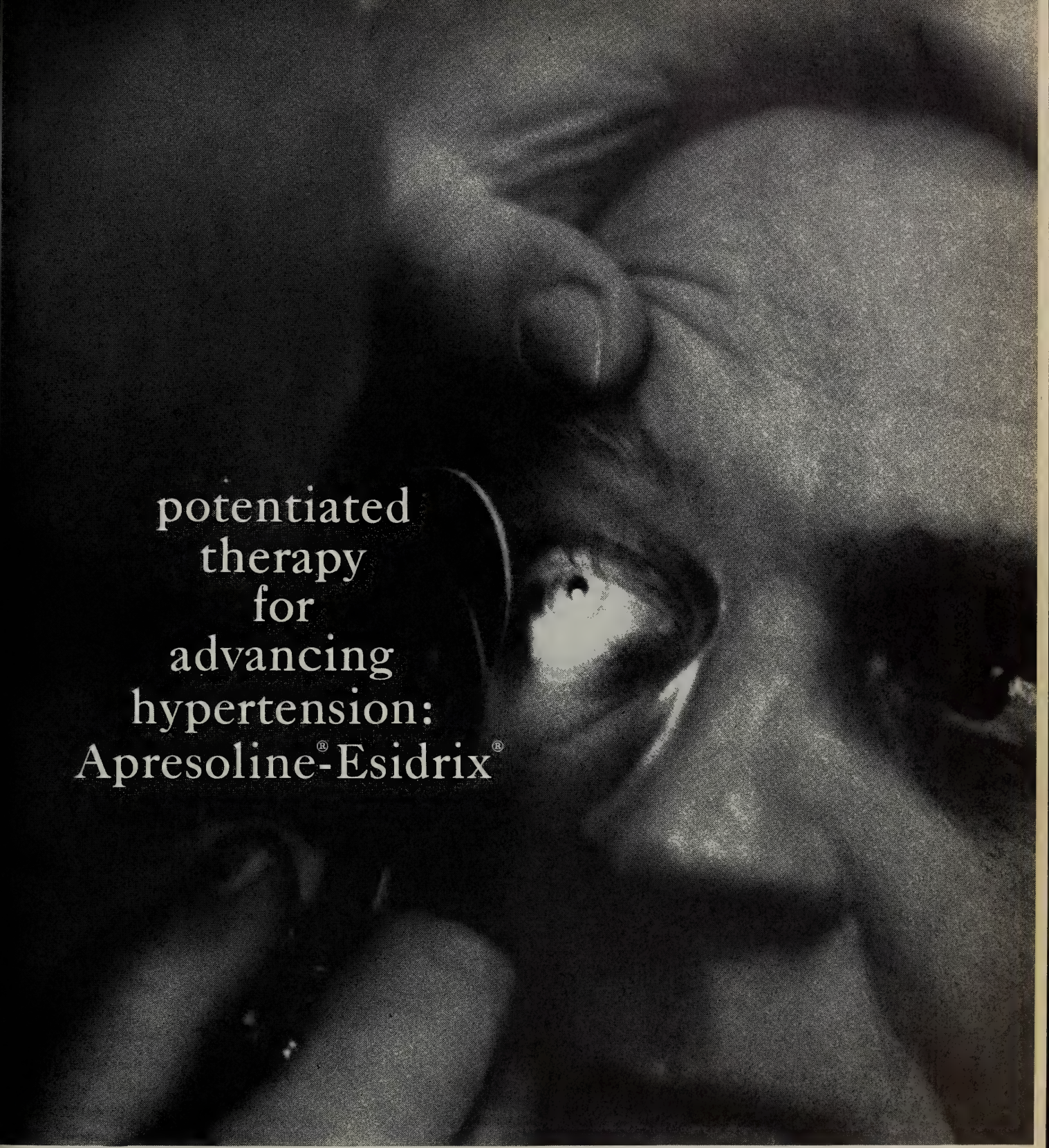
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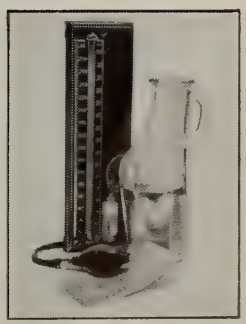
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New Antibiotic Proves Effective For Minor Infections

Griseofulvin has been termed an effective means of treating superficial fungus infections of the skin.

Dr. C. H. McCuistion, Jr., Austin, Texas, dermatologist, writing in the *Journal of the American Medical Association*, said "griseofulvin is an effective antibiotic for superficial fungus infections and is safe in therapeutic doses.

Dr. McCuistion, assistant clinical professor of dermatology, Baylor University Postgraduate School of Medicine, reported on the use of griseofulvin in the control of ringworm infection of 28 children at the Austin State School for the mentally retarded and 4 private patients.

Treatment of the 29 patients suffering either ringworm of the scalp or ringworm of the body resulted in a cure in all but one case, he said.

The three patients with an infection of the finger nails and toe nails are still under treatment, he said, and the use of griseofulvin failed to cure one patient with an infection of the feet.

"No instance of intolerance to griseofulvin requiring reduction of the dosage or cessation or administration of the drug was encountered," Dr. McCuistion said.

Griseofulvin is a fermentation product of three species of penicillium he said, and was isolated in

(Continued on Page 110)

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buttons are to keep people warm



cats are so you can have kittens



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BOOKS RECEIVED

Books received by CALIFORNIA MEDICINE *are acknowledged in this column. Selections will be made for more extensive review in the interests of readers as space permits.*

DOCTOR STRAND—Boris Sokoloff. Vantage Press, Inc., 120 W. 31st Street, New York 1, New York, 1960. 205 pages, $3.50.

THE HUMAN SPINE IN HEALTH AND DISEASE—Anatomicopathologic Studies—George Schmorl, M.D.; Clinicoradiologic Aspects—Herbert Junghanns, M.D. The First American Edition, Translated and Edited by Stefan P. Wilk, M.D., and Lowell S. Goin, M.D. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, New York, 1959. 285 pages, $21.00.

INTRODUCTION TO COLPOSCOPY—A Diagnostic Aid in Benign and Preclinical Cancerous Lesions of the Cervix Uteri—Karl A. Bolten, M.D., Gynecologist and Research Associate, Dept. of Pathology, Subdivision Obstetric and Gynecologic Pathology, University of Oklahoma, School of Medicine. Cooperating in Pathology, William E. Jaques, M.D., Chairman and Professor of Pathology, University of Oklahoma, School of Medicine; with Forewords by Joe Vincent Meigs, M.D., and Daniel W. Goldman, M.D. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, New York, 1960. 76 pages, $7.75.

THE STORY OF DISSECTION—Jack Kevorkian, M.D. Philosophical Library, Inc., 15 East 40th Street, New York 16, New York, 1959. 80 pages, $3.75.

BEHAVIORAL CHANGE IN THE CLINIC—A Systematic Approach—Gerald R. Pascal, Ph.D., Professor of Psychology, Director of the Clinical Training Program in Psychology and Director of the Psychological Service Center, University of Tennessee. Grune & Stratton, 381 Fourth Avenue, New York 16, New York, 1959. 128 pages, $4.75.

MICROBIAL VARIATION—Edited by V. D. Timakov, member of the Academy of Medical Sciences of the U.S.S.R. Translated from the Russian by G. H. Beale. Pergamon Press Inc., 122 East 55th Street, New York 22, New York. 202 pages, $6.50.

SMOKING AND HEALTH—Alton Ochsner, M.D. Julian Messner, Inc., 8 West 40th Street, New York 18, New York, 1959. 108 pages, $3.00.

A PHARMACOLOGIC APPROACH TO THE STUDY OF THE MIND—Edited by Robert M. Featherstone, Ph.D., Professor and Chairman of the Dept. of Pharmacology, University of California School of Medicine, San Francisco; and Alexander Simon, M.D., Professor and Chairman of the Dept. of Psychiatry, University of California School of Medicine, and Medical Superintendent Langley Porter Neuropsychiatric Institute, San Francisco. Charles C. Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois, 1959. 399 pages, $10.75.

TREATMENT OF BRONCHIAL NEOPLASMS—Robert R. Shaw, M.D., and Donald L. Paulson, M.D.; with a chapter on BRONCHIAL ADENOMA, by John Lester Kee, Jr., M.D. Charles C. Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois, 1959. 135 pages, $8.00.

ROENTGENOLOGIC DIAGNOSIS IN OPHTHALMOLOGY—Edward Hartmann, M.D., Chief of the Ophthalmic Department, Lariboisière Hospital and American Hospital in Paris, and Evelyn Gilles, M.D., Chief of the Roentgenology Department, Quinze-Vingt Ophthalmic Hospital; Associate in Roentgenology, Saint Antoine Hospital and American Hospital in Paris. Translated by George Z. Carter, M.D., Assistant Professor of Ophthalmology, Albert Einstein College of Medicine. Edited by Conrad Berens, M.D., F.A.C.S., Lecturer on Ophthalmology, New York University Post-Graduate Medical School; Advisory Attending Surgeon, New York Eye and Ear Infirmary; Consultant Emeritus, American Board of Ophthalmology. J. B. Lippincott Company, East Washington Square, Philadelphia 5, Pennsylvania, 1959. 375 pages, $15.00.

ANTITHROMBOTIC THERAPY—Paul W. Boyles, M.D., Instructor in Medicine, University of Miami School of Medicine, Jackson Memorial Hospital, Miami, Florida; and Director, Coagulation Research Laboratory, Miami Heart Institute, Miami Beach, Florida. (Modern Medical Monographs, 20—Editor in Chief: Irving S. Wright, M.D.; Consulting Editor: Richard H. Orr, M.D.). Grune & Stratton, 381 Fourth Avenue, New York 16, New York, 1959. 131 pages, $5.00.

CLINICAL PSYCHOPATHOLOGY — Kurt Schneider, Professor, University of Heidelberg, Germany. Translated by M. W. Hamilton, B.A. (Lit. Hum.) Oxon., University of Manchester, Dept. of Psychiatry, The Royal Infirmary, Manchester, England. Preface by E. W. Anderson, M.D., M.Sc., F.R.C.P., D.P.M., Professor, University of Manchester, Dept. of Psychiatry, The Royal Infirmary, Manchester, England. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, New York, 1959. 173 pages, $4.50.

CODE OF LIFE TO HEALTH, WEALTH, HAPPINESS, A—J. F. G. Hunter. Greenwich Book Publishers, 489 Fifth Avenue, New York 17, New York, 1959. 33 pages, $2.00.

COUNTERTRANSFERENCE — Benjamin Wolstein, Ph.D., New School for Social Research; the W. A. White Psychoanalytic Society, New York. Grune & Stratton, Inc., 381 Fourth Ave., New York 16, New York, 1959. 179 pages, $5.50.

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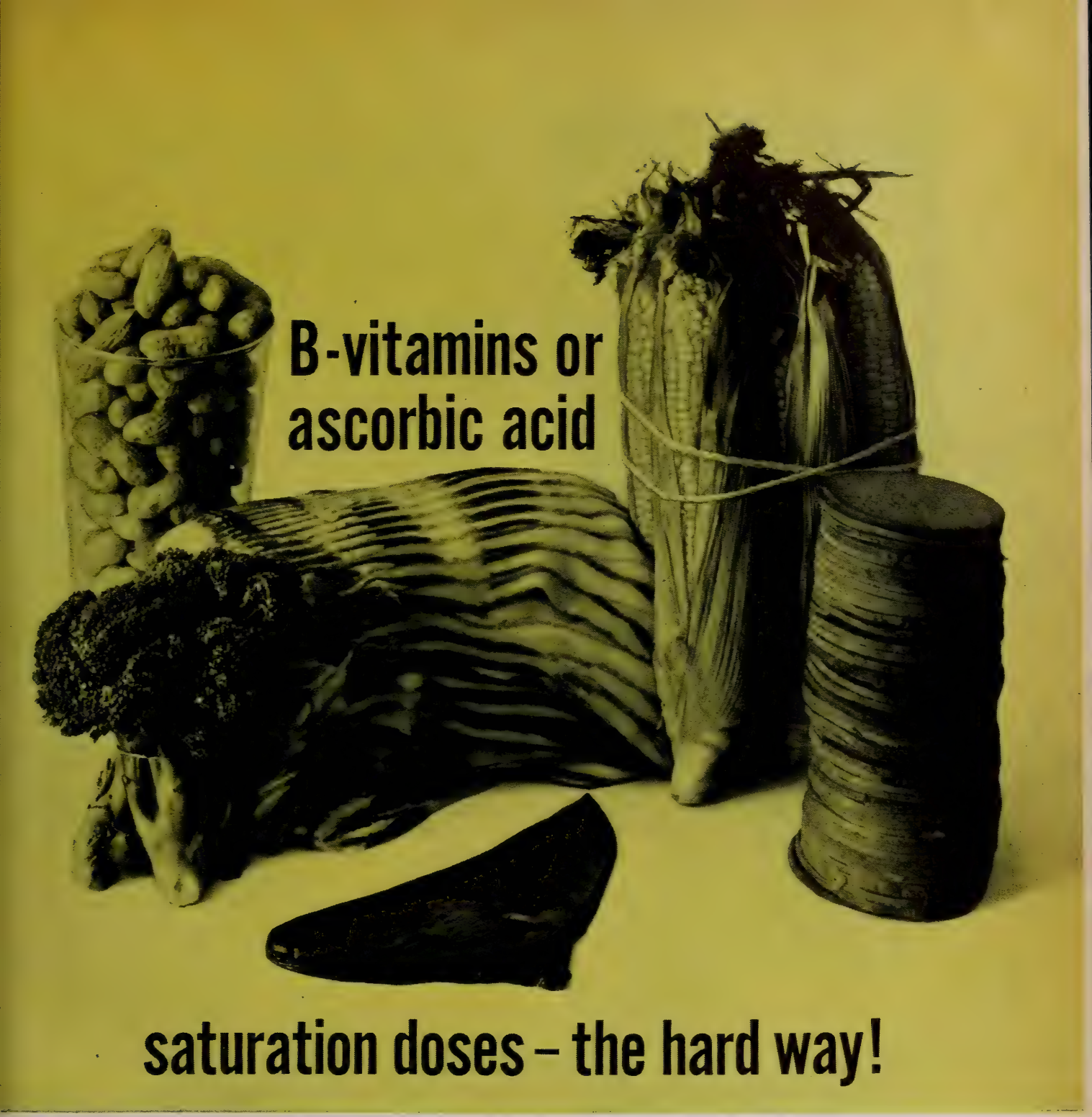
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(Continued from Page 108)

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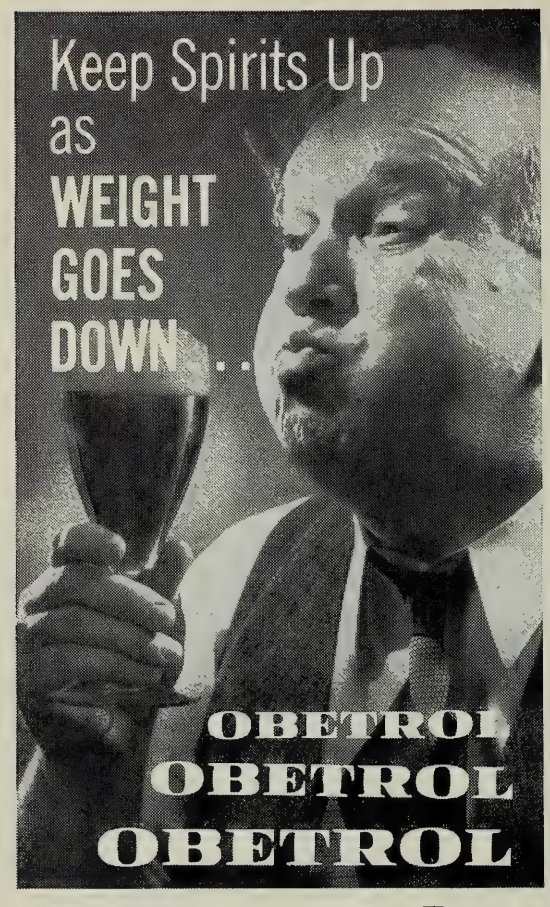
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Doctors Get Smaller Share Of Medical Care Dollar

American physicians and dentists are getting a smaller share of the medical care dollar today.

This fact was revealed by the Economic Research Department of the American Medical Association, based on United States Department of Commerce data.

In 1938, physicians received 31 cents of the medical care dollar, but the physician's share in 1958 was 24 cents—or 22.6 per cent less than 20 years ago.

Dentists received 13 cents of the medical care dollar in 1938, but their share dropped 23.1 per cent to 10 cents in 1958.

The breakdown of figures was based on a total of $16.4 billion spent for medical care in 1958—an average of $95 a person.

This represents 5.6 per cent of the $293 billion spent by Americans during the year for all goods and services.

The percentage of 1958 expenditures for medical care compares with 5.8 per cent for recreation and 5.3 per cent paid out for tobacco and alcoholic beverages.

Of total consumer expenditures for medical care in 1958, hospitals claimed $4.3 billion, physicians $3.9 billion, drugs $3.3 billion, dentists $1.7 billion, health insurance $1.4 billion, and ophthalmic products and orthopedic supplies $1.1 billion.

The remaining $769 million went for all "other medical costs," including osteopathic services, private duty nurses, chiropractors, chiropodists, and other miscellaneous curative and healing services.

In addition to the amount which physicians and dentists received as their share of the medical cost dollar, 22 cents went for drugs in 1938, but the figure dropped 9.1 per cent in 1958 to 20 cents.

Purchases of appliances took another 7 cents of the 1958 dollar, while items in the "all other" categories claimed the remaining 5 cents.

Items showing a proportionate increase include hospitals, which received 17 cents of the dollar in 1938 and 26 cents in 1958—a jump of 52.9 per cent. Hospitals attribute this rise to the expansion of hospital services and their greater utilization which has increased the number and variety of skilled personnel required.

More than 71 per cent of the United States population today is protected by some form of health insurance, compared with less than 10 per cent in 1938.

This means that in a large measure illness is not being paid for by income received in any particular day, week, month or year.

And while more Americans are budgeting more of their income for medical care, and more emphasis is being placed on planning against future illness, the physician is receiving a smaller portion of the total money spent for medical care.

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Advantages: Analgesic potency of 1 tablet is clinically equivalent to 1 grain of codeine, but phenyramidol is not narcotic nor habituating. Tolerance and cumulative effects have not been noted. Muscle relaxant effect is comparable to the most potent muscle relaxants available for oral use.

Indications:Analexin—for relief of pain and associated muscle tension or spasm in: dysmenorrhea; abdominal and epigastric distress; genitourinary conditions; tension headache; gout; low back pain; myalgia; sprains and strains; glass arm; wry neck; osteoarthritis.

Analexin-AF—for relief of pain and musculoskeletal tension complicated by inflammation and/or fever, as in: arthritis; arthralgia; bursitis; tendinitis; myalgia of strain and tear.

Clinical Reports: Batterman, Grossman and Mouratoff[3] compared phenyramidol with aspirin, sodium salicylate and a placebo in a series of 195 patients with various painful conditions. The authors state "Not only is satisfactory relief of painful states achieved in the majority of patients regardless of etiology and duration of pain, but there is also no evidence suggestive of cumulative toxicity. Furthermore, in contrast to codeine and meperidine, the likelihood of untoward reactions occurring in ambulant patients is not high." Wainer[4] used phenyramidol in a series of 200 cases, fifty with dysmenorrhea, 50 with headache and premenstrual tension, and 100 cases with postpartum pain. In the 50 dysmenorrhea patients, he achieved good or excellent results in 45. All 50 cases with headache and premenstrual tension responded with excellent results. And a combination of phenyramidol and aluminum aspirin (Analexin-AF) successfully replaced aspirin and codeine in the 100 cases of postpartum pain.

Dosage: **Analexin**—1 or 2 tablets every 4 hours. In dysmenorrhea, 2 tablets at onset of pain; then, one tablet every 2-4 hours as needed.
Analexin-AF—Two tablets every 4 hours or as required.

Side Effects: Analexin does not produce such centrally induced side effects as sedation, euphoria, etc. The infrequent occurrence of mild gastrointestinal irritation or epigastric distress, pruritus with and without rash, has been noted. However, these effects subside promptly when dosage is reduced or discontinued.

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Collegians' Mental Problems Are Widely Underrated

The seriousness of mental disturbances among the nation's college students is widely underrated, a psychiatrist said recently.

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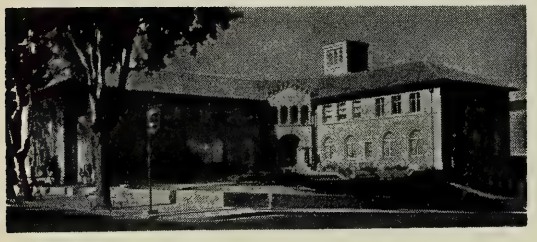
The myth of the "happy college student" based on the superficial impression that everyone on campus is having a wonderful time may be partly responsible for this misconception, Dr. Melvin L. Selzer of the University of Michigan, Ann Arbor, wrote in the February American Medical Association *Archives of Psychiatry*.

"The over-all impression created has been that the psychic difficulties experienced by college students are not as serious as those that beset the rest of the population," he said. "In general one can readily be left with the impression that college students' emotional disorders are largely situational and transient, with a substantial number suffering no worse than mild adjustment reactions."

However, this impression is not borne out by data accumulated at the Mental Hygiene Clinic of the university's health service, he said.

Roughly 8 per cent of the total student body visit

(Continued on Page 44)



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References: 1. Ayd, F. J., Jr.: Bull. School Med. Univ. Maryland *44*:29, 1959. 2. Azima, H., and Vispo, R. H.: A. M. A. Arch. Neurol. & Psychiat. *81*:658, 1959. 3. Lehmann, H. E.; Cahn, C. H., and de Verteuil, R. L.: Canad. Psychiat. A. J. *3*:155, 1958. 4. Mann, A. M., and MacPherson, A. S.: Canad. Psychiat. A. J. *4*:38, 1959. 5. Sloane, R. B.; Habib, A., and Batt, U. E.: Canad. M. A. J. *80*:540, 1959. 6. Straker, M.: Canad. M. A. J. *80*:546, 1959. 7. Strauss, H.: New York J. Med. *59*:2906, 1959.

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Collegians' Mental Problems Are Widely Underrated

(Continued from Page 40)

the clinic annually. A survey of the students seen by three psychiatrists at the clinic from July 1, 1957, to June 30, 1958, revealed a higher incidence of serious mental disorders than previous impressions issuing from college health services.

"Of 506 students interviewed . . . 35.4 per cent were psychoneurotic, 24.5 per cent had personality disorders, and 21.7 per cent were schizophrenes. Adjustment reactions comprised only 8.3 per cent of the disorders noted. Thus, 81.6 per cent of the patient group fell into the three major psychodiagnostic categories."

While the largest number of students interviewed were diagnosed psychoneurotic, Dr. Selzer said, "many reports practically deny the presence of psychoneuroses among college students."

Previous reports have placed the incidence of psychoses at 2.4 per cent to 8 per cent, he said, compared with 21.7 per cent for schizophrenics, the only type of psychoses noted in the Michigan study.

The incidence of personality disorders also is "much higher than would be expected on the basis of previous material," he said.

The 8.3 per cent whose trouble was diagnosed as adjustment reactions compares with 6 per cent recently reported at an adult community psychiatric

(Continued on Page 60)

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3. Scheinberg et al: Surgery 24:972, 1948 (Dec.).

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Collegians' Mental Problems Are Widely Underrated

(Continued from Page 44)

clinic, Dr. Selzer pointed out.

"There is reason to believe that patients seen by a college health service psychiatrist are diagnostically comparable to patients encountered in any outpatient psychiatric clinic accessible to the general public," he said.

Dr. Selzer said his survey indicates that students at college mental hygiene clinics are often underdiagnosed.

"This can be attributed to a number of possible causes," he said. "The necessity for the busy therapist to concentrate on the immediate precipitating complaint may have the effect of obscuring the presence of underlying pathology.

"Other misleading factors may be the patient's youth, intellectual ability, and academic prowess. It may be difficult to accept the idea that members of this group are emotionally ill."

Finally, he said, there is the college student myth, the belief that campus life is a series of parties.

". . . popular notions do have a way of permeating the institutions affected, and college health services may be no exception," he concluded. "The 'myth' may have played some role in seducing the unwary to accept certain problems as essentially 'social,' or 'academic,' or 'family,' when in reality they represent symptoms of emotional illness."

Multiple Pregnancy Can Be Diagnosed in Fifth Month

By using the machine ordinarily used to measure brain waves, physicians now can detect tiny heart beats in the womb and tell an expectant mother whether she will bear a single child, twins, or triplets.

The diagnosis can be made with 100 per cent accuracy between the fifth and seventh months of pregnancy.

Drs. C. A. Novotny, W. K. Hass, and D. A. Callagan of the United States Navy Medical Corps reported this finding in the October 17 issue of the *Journal of the American Medical Association.* They conducted electroencephalograph tests on 295 women at the United States Naval Hospital, Portsmouth, Virginia.

Electrodes of the electroencephalograph are pasted to expectant mother's bodies, permitting a systematic search for fetal heart beats. The machine picks up the electrical impulses from the fetal heart and records them on a graph. The number of fetuses is indicated by slightly different heart beats.

Three hundred and twenty-one tracings were obtained from the 295 patients by this method. In a vast majority of case studies it also was possible to support the occurrence of fetal death.

Tracings were taken at random between the 11th and 40th week of pregnancy. The 20th through the

(Continued on Page 62)

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Multiple Pregnancy Can Be Diagnosed in Fifth Month

(Continued from Page 60)

27th week was the most favorable period, the physicians said, and 100 per cent accuracy was possible when diagnosing twins or triplets during this period. In all diagnoses during the 20th through 27th week, a 90 per cent degree of accuracy was obtained, they stated.

In all cases, between the 11th and 40th week of pregnancy they said an 81 per cent degree of accuracy of diagnosis was obtained.

The earliest positive diagnosis of twins was made at 16 weeks. An accurate diagnosis of triplets was easily made at 20 weeks. The physicians noted that an x-ray made of the same patient was still inconclusive for triplets four weeks later.

Their investigation was prompted by a desire for early diagnosis due to complications of multiple pregnancies; by concern about irradiation hazards of x-ray diagnosis, and by the increasing availability and efficiency of the electroencephalograph.

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The Number and Distribution of Physicians in California

JUSTIN J. STEIN, *M.D.*, Los Angeles

• **The ratio of physicians to general population in California has been approximately the same for many years, the influx of physicians having kept pace with the population trend.**

For many years California has licensed more physicians than any other state.

The five medical schools in this state have been increasing the number of candidates admitted to the freshman class. Attempts are being made to increase the number of medical schools in this state to seven in anticipation of the future growth and medical needs of the population.

The heaviest concentration of physicians is as always in the thickly populated areas as determined by the population physician ratio.

A study of the detailed statistics presented in this paper should be of interest to all California physicians.

Of interest to all physicians in this rapidly growing state is the potential patient load per physician. In 1950, the population was 10,609,000; in 1955, 13,035,000; it is estimated to be 15,830,000 this year, and 22,090,000 is predicted for 1970.[2]

Thus far the ratio of population to physicians has remained almost constant. It is amazing how the physician and the population trend to California has remained so balanced. For example, in 1950 (Table 1), when the population of the state was 10,609,000 the number of licensed physicians practicing in the state was 15,810, a ratio of 671 to 1. In 1958 the population numbered 14,752,000 and physicians 21,641, a ratio of 682 to 1. If all the 5,730 physicians with California Medical licenses who were practicing in other states in 1950 (Table 1) had been practicing in California instead, the ratio would have been 493 to 1; and for 1958 the corresponding ratio would have been 458 to 1.

There has been no attempt to curtail the number of physicians coming into this state. Licensing reciprocity with other states is maintained. Any qualified physician who has the proper credentials and who can qualify on the basis of the professional standards as outlined in the laws relating to the practice of medicine in California can obtain a license to practice.

In Table 2, the population-to-physician ratio in each county is given for the years 1955 and 1958. The heaviest concentration of physicians was, as always, in the thickly populated areas. Again the constancy of the ratio from year to year is notable.

More licenses to practice medicine are given in California (Table 3) than in any other state in the United States. During the past six years, approximately two thousand licenses have been issued each

The author is past president and a member of the California State Board of Medical Examiners.

Submitted November 6, 1959.

TABLE 1.—*Ratio of Doctors of Medicine to Population in California*

Year	Total Calif. Population	No. of M.D.'s in California	Population Per M.D. in California	California Licentiates in Other States	Total No. California Licentiates	Population Per Each Licensed California M.D.
1950	10,609,000	15,810	671	5,730	21,540	493
1951	11,058,000	16,242	681	6,104	22,346	495
1952	11,743,000	16,565	709	6,448	23,013	510
1953	12,168,000	17,215	707	6,919	24,134	504
1954	12,595,000	18,135	695	7,669	25,804	488
1955	13,035,000	18,984	687	8,406	27,390	476
1956*	13,594,000					
1957	14,190,000	20,710	685	9,693	30,403	467
1958	14,752,000	21,641	682	10,577	32,218	458

*Information not available to fill blank spaces.

TABLE 2.—*Table Showing Ratio of Physicians to Population*

County	Population 7/1/54	Population 7/1/58	Licensed Physicians, M.D. 3/2/55	Licensed Physicians, M.D. 3/2/58	Licensed Physicians, D.O. 10/1/54	Licensed Physicians, D.O. 6/1/58	Total 1955	Total 1958	No. of Persons Per Physician 1955	No. of Persons Per Physician 1958
Alameda	838,900	886,800	1,458	1,570	60	51	1,518	1,621	552	547
Alpine	300	400	0	0	0	0	0	0		
Amador	9,100	9,000	4	4	3	4	7	8	1,300	1,125
Butte	68,200	73,700	80	93	8	11	88	104	786	709
Calaveras	9,800	9,400	5	5	5	5	10	10	980	940
Colusa	11,800	11,600	4	5	6	7	10	12	1,180	967
Contra Costa	335,200	370,400	338	422	9	8	347	430	966	861
Del Norte	14,600	19,100	6	8	1	1	7	9	2,087	2,122
El Dorado	18,300	21,700	11	13	1	2	12	15	1,525	1,447
Fresno	300,200	344,400	319	355	29	40	348	395	862	872
Glenn	16,800	16,900	13	13	1	0	14	13	1,200	1,300
Humboldt	87,600	96,900	76	84	3	1	79	85	1,108	1,140
Imperial	68,000	70,800	57	61	3	1	60	62	1,133	1,142
Inyo	12,200	11,000	13	9	2	1	15	10	813	1,100
Kern	262,800	279,400	229	263	20	20	249	283	1,055	987
Kings	48,100	47,800	31	39	2	1	33	40	1,457	1,195
Lake	11,300	12,100	11	11	0	0	11	11	1,027	1,100
Lassen	19,600	13,900	11	9	0	0	11	9	1,781	1,544
Los Angeles	4,927,300	5,791,900	8,035	8,916	1,371	1,396	9,406	10,312	523	562
Madera	38,900	39,800	26	23	1	2	27	25	1,441	1,592
Marin	100,700	136,800	249	328	4	3	253	331	398	413
Mariposa	5,300	4,700	4	4	0	0	4	4	1,325	1,050
Mendocino	49,900	52,800	47	63	1	1	48	64	1,039	825
Merced	78,000	88,400	53	59	1	1	54	60	1,444	1,473
Modoc	10,300	9,100	4	5	0	0	4	5	2,575	1,820
Mono	1,800	2,300	0	1	1	2	1	3	1,800	767
Monterey	155,500	192,200	190	244	14	12	204	256	762	751
Napa	56,700	63,500	114	141	2	1	116	142	488	447
Nevada	20,000	17,900	24	20	1	1	25	21	800	852
Orange	293,900	596,800	424	623	57	93	481	716	611	834
Placer	47,700	51,400	59	67	4	3	63	70	757	734
Plumas	13,000	11,700	14	13	0	0	14	13	928	900
Riverside	204,300	258,200	254	298	40	40	294	338	694	764
Sacramento	346,200	451,200	391	480	36	54	427	534	810	845
San Benito	14,700	15,500	12	14	0	0	12	14	1,225	1,107
San Diego	738,500	943,400	989	1,179	82	105	1,071	1,284	689	735
San Francisco	785,900	791,100	2,254	2,367	31	22	2,285	2,389	343	331
San Joaquin	228,600	241,000	220	254	18	19	238	273	960	883
San Luis Obispo	59,600	66,500	87	107	8	7	95	114	627	583
San Mateo	321,900	399,100	517	642	9	14	526	656	611	608
Santa Barbara	109,300	123,500	215	248	9	11	224	259	487	477
Santa Clara	373,200	574,800	707	887	25	16	732	903	509	637
Santa Cruz	68,300	71,200	108	117	9	12	117	129	583	552
Shasta	43,700	51,200	42	57	2	1	44	58	993	883
Sierra	2,900	2,400	2	1	2	2	4	3	725	800
Siskiyou	32,900	30,700	22	26	2	0	24	26	1,370	1,181
Solano	117,800	125,500	118	123	2	1	120	124	981	1,012
Sonoma	121,700	144,700	182	218	6	7	188	225	647	643
Stanislaus	143,900	149,700	160	187	3	2	163	189	882	792
Sutter	29,200	30,800	11	13	0	0	11	13	2,654	2,369
Tehama	20,000	22,800	15	16	1	1	16	17	1,250	1,341
Trinity	6,300	9,600	4	7	0	0	4	7	1,575	1,371
Tulare	148,600	151,200	116	133	14	18	130	151	1,143	1,001
Tuolumne	14,100	13,600	10	12	4	2	14	14	1,007	971
Ventura	141,100	175,300	162	194	20	22	182	216	775	812
Yolo	50,600	57,800	42	49	1	1	43	50	1,176	1,156
Yuba	31,200	26,600	38	42	2	1	40	43	780	619

year. During this same period, fewer than four hundred of the annual number of licentiates were graduates of California medical schools.

For the past 14 years, this state has licensed more physicians annually than has New York. The six states that usually issue the most licenses to practice medicine are California, New York, Ohio, Illinois, Pennsylvania and Texas.

The medical schools in California have increased their number of graduates. The College of Medical Evangelists was chartered under its present name in 1909; and in 1914 the first class, six students, was graduated. In 1958-1959 this college graduated 77. The present School of Medicine of the University of Southern California opened in 1928 and in 1933 graduated seven students; in 1934, 30; in 1959, 66. The University of California School of Medicine, San Francisco, recently increased the size of its freshman class to one hundred students. The University of California at Los Angeles School of Medicine had 26 students in its first graduating class, in 1955; then 46 in 1959. It is to enroll 72

TABLE 3.—*Number of Licenses to Practice Medicine Issued in California and Classification of Applicant*

Year	Graduates—Other States Reciprocity	Nat'l. Board Recipients	Government Credentials	Graduates California Schools Written Exams	Graduates—Other States Written Exams	Foreign Graduates	California Total No. Licensed	No. Licensed in New York
1940	177	30	5	194	151	39	596	
1941	200	32	6	206	160	34	638	
1942	223	48	12	238	157	44	722	
1943	319	55	8	242	208	16	848	
1944	405	72	9	336	167	12	1,001	
1945	599	98	11	281	187	17	1,193	
1946	1,289	247	70	321	209	16	2,152	1,513
1947	1,032	246	55	285	219	23	1,860	1,645
1948	1,017	225	31	280	240	15	1,808	1,385
1949	776	214	36	248	244	34	1,552	1,452
1950	567	233	39	270	228	49	1,386	1,161
1951	627	230	21	253	171	77	1,379	1,107
1952	777	316	39	245	209	107	1,693	1,292
1953	1,007	397	27	300	186	103	2,020	1,348
1954	1,003	438	30	267	161	101	2,000	1,498
1955	990	405	21	292	186	142	2,036	1,367
1956	782	453	17	293	123	133	1,801	1,355
1957	995	580	22	281	145	131	2,154	1,375
1958	1,038	618	21	263	168	151	2,259	1,584

TABLE 4.—*Number of Students in Each of the Four Classes of the School of Medicine of the College of Medical Evangelists During the Ten-Year Period 1949-1958 (W. E. Macpherson[4])*

	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
Freshmen	97	97	97	96	96	97	96	96	96	96
Sophomores	99	96	93	95	91	99	98	84	82	91
Juniors	82	100	94	93	90	92	101	97	93	86
Seniors	81	82	100	93	92	92	85	98	97	80
Graduates	81	81	100	93	92	92	84	98	96	77

Geographical Distribution of Entering Freshman Students During the Above Ten-Year Period

Ala.	Ariz.	Ark.	Cal.	Colo.	Conn.	Del.	Fla.	Ga.	Idaho	Ill.	Ind.	Iowa	Kas.	Ky.	La.
2	5	7	301	18	2	1	20	1	12	11	13	10	11	3	6
Me.	**Md.**	**Mass.**	**Mich.**	**Minn.**	**Mo.**	**Mont.**	**Neb.**	**Nev.**	**N.H.**	**N.J.**	**N.M.**	**N.Y.**	**N.C.**	**N.D.**	**Ohio**
2	32	17	41	12	7	5	17	2	2	6	4	25	7	5	21
Okla.	**Ore.**	**Pa.**	**R.I.**	**S.D.**	**Tenn.**	**Tex.**	**Utah**	**Va.**	**Wash.**	**W.Va.**	**Wisc.**	**Alaska**	**Canada**	**Hawaii**	**Misc. Foreign**
12	35	11	1	6	11	20	3	6	72	1	9	1	34	16	98

There were a total of 964 freshman students admitted during this ten-year period, 301 or 31.2 per cent of whom were from California.

TABLE 5.—*University of Southern California School of Medicine—Number of Students and Graduates for the Past 10 Years (C. G. Loosli[3])*

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Freshmen	64	68	67	67	69	69	69	68	68	69	68
Sophomores	65	63	67	66	68	69	66	66	68	62	62
Juniors	61	67	65	68	71	69	69	69	68	61	64
Seniors	60	67	66	67	72	69	67	68	68	60	66
Graduates	59	67	66	67	72	69	67	68	67	60	66

TABLE 6.—*Data on Enrollment and Graduation, University of Southern California School of Medicine (C. G. Loosli[3]).*

Year	No. Grad.	Freshmen from California	Per Cent	No. from Other States	Out-of-State Distribution of Freshmen*
1949	59	41	66 2/3	23	Washington, Georgia, Nevada (5), New Mexico (5), New York (3), Florida, Louisiana, Illinois, Michigan, Missouri, South Dakota, Ohio (5), Connecticut, Utah, Idaho, Wisconsin, Nebraska
1950	67	59	83 1/3	9	Wyoming, Florida, Kentucky, Massachusetts, North Carolina, Texas, New Mexico, Arizona (5)
1951	66	63	94	4	Nevada (5), New Mexico, Arizona
1952	67	55	82		No information. Suggest consulting the Education number of JAMA.
1953	72	66	90	3	Arizona, Utah, Illinois
1954	69	62	89	7	Wyoming, Texas, Arizona, Pennsylvania, Utah, Ohio, Maryland
1955	67				No information on home states.
1956	68	28	66 2/3	40	New York (5), Michigan (5), Connecticut, Colorado, West Virginia, Wyoming, Pennsylvania, Arizona, Massachusetts (5), New Jersey (4), Illinois (3), Wisconsin, North Dakota, Minnesota, Nebraska, Arkansas, Ohio (4), Utah (5), Oklahoma (5), Kansas (5), Washington (5), Italy, Palestine
1957	67				No information on home states.
1958	60	65	93	4	Minnesota, Nevada, New York, Arizona
1959	66				No information on home states.

*No breakdown is available on geographical distributions of graduating seniors. The distribution of freshmen may be considered indicative.

TABLE 7.[1]—*Data on Enrollment, University of California School of Medicine, San Francisco*

	1950	1951	1952	1953	1954	1955	1956	1957	1958
Freshmen	72	71	76	76	76	76	78	78	101
Sophomores	72	71	76	76	73	80	76	81	74
Juniors	73	72	77	81	79	76	84	81	83
Seniors	71	66	73	74	79	79	74	83	80
Total	288	280	302	307	307	311	312	323	338

Data on Make-up of Freshman Classes 1954-1958

ENTERING FRESHMEN

	1954	1955	1956	1957	1958
California	76	75	77	74	97
Out-of-State	?	1 (Ariz.)	0	2 (1 Idaho) (1 N. Mex.)	4 (3 Ariz.) (1 Wisc.)
Foreign	0	0	1 (Syria)	2 (1 Korea) (1 Indonesia)	0
Women	3	9	7	6	10

TABLE 8.[6]—*Data on Enrollment, University of California at Los Angeles School of Medicine*

	1951	1952	1953	1954	1955	1956	1957	1958	1959
Freshmen	28	32	32	50	50	50	50	56	57
Sophomores		30	30	32	48	47	50	54	58
Juniors			27	36	33	48	46	50	50
Seniors				27	36	31	47	47	50
Total	28	62	89	145	167	176	193	207	215
Graduates					26	36	30	47	46

Data on Make-up of Freshman Classes 1951-1959

ENTERING FRESHMEN

	1951	1952	1953	1954	1955	1956	1957	1958	1959
California	27	32	32	32	29	48	47	49	52
Out-of-State		0	0	0	3 (2 Ariz.) (1 Mich.)	2 (1 Ariz.) (1 Idaho)	2 (1 Hawaii) (1 Utah)	5 (4 Ariz.) (1 N.Mex.)	4 (3 Ariz.) (1 Ore.)
Foreign	1	0	0	0	0	0	1 (Hong Kong)	1 (Lebanon)	1 (Iran)
Women	2	3	2	2	2	4	2	8	4

TABLE 9.—*Source of Successful Candidates from Other States for Reciprocity Licensure in California*

	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
Alabama	2	1	1	2	0	2	1	0	4	2	2	1	3	4
Alaska	1	0	0	1	0	0	0	0	1	0	0	0	1	0
Arizona	3	5	2	3	2	0	4	3	11	2	4	1	3	7
Arkansas	4	4	5	7	6	7	4	7	7	12	8	4	3	5
Colorado	12	18	15	20	10	7	24	14	13	14	27	22	32	21
Connecticut	3	4	2	0	2	4	3	2	6	4	3	1	2	3
Delaware	0	0	0	3	0	0	1	1	0	0	1	0	1	3
Dist. of Columbia	4	1	0	0	1	1	3	2	2	7	9	2	5	2
Florida	3	5	4	6	3	3	6	4	3	5	4	4	8	12
Georgia	5	16	7	11	7	1	3	5	8	8	9	9	12	22
Hawaii	0	1	2	2	5	6	2	9	5	5	11	4	3	2
Idaho	2	1	2	1	1	2	1	3	0	1	5	2	4	1
Illinois	108	225	200	211	141	101	98	117	165	145	129	105	136	119
Indiana	16	33	18	34	28	14	27	42	35	36	40	29	37	30
Iowa	6	24	15	14	19	16	7	12	30	38	40	18	22	34
Kansas	15	42	30	23	20	18	7	23	32	22	29	24	23	35
Kentucky	8	19	14	13	11	11	6	18	20	22	15	19	23	9
Louisiana	10	30	18	19	16	12	18	28	28	26	20	14	19	25
Maine	1	3	1	5	0	2	2	2	2	2	1	0	3	3
Maryland	21	34	20	25	27	11	23	19	33	23	25	36	36	39
Massachusetts	3	6	6	5	2	3	2	2	2	3	4	5	5	4
Michigan	38	97	62	77	47	36	40	36	57	63	47	58	72	83
Minnesota	38	72	90	76	60	39	55	61	71	96	70	61	62	70
Mississippi	4	1	3	3	6	2	2	0	2	4	5	3	2	5
Missouri	24	54	33	46	35	22	24	41	59	56	68	56	69	86
Montana	4	1	1	0	2	1	0	3	0	1	4	0	2	2
Nebraska	16	51	33	31	36	12	17	22	34	31	36	17	34	29
Nevada	1	2	0	2	1	1	0	1	0	1	0	0	0	1
New Hampshire	0	0	1	1	0	1	1	2	2	1	0	0	0	1
New Jersey	9	13	12	9	11	6	10	7	11	10	7	2	3	7
New Mexico	0	0	0	0	0	1	0	0	0	0	0	1	1	0
New York	67	133	103	88	68	41	41	30	37	30	29	23	29	41
North Carolina	2	6	7	5	6	2	3	2	4	9	15	7	7	16
North Dakota	1	5	0	1	3	2	3	3	1	2	6	1	8	9
Ohio	45	99	75	67	49	42	49	70	78	61	81	75	99	65
Oklahoma	7	14	11	6	10	10	8	10	15	10	14	9	13	16
Oregon	12	13	10	9	8	9	11	11	19	19	20	27	19	17
Pennsylvania	34	84	83	73	53	38	36	35	49	68	46	30	51	56
Rhode Island	2	3	3	0	0	2	1	0	1	2	0	0	1	1
South Carolina	1	2	2	2	1	3	1	1	2	2	7	5	1	4
South Dakota	1	4	2	1	2	2	2	3	2	4	2	1	6	3
Tennessee	9	43	34	21	12	16	14	16	24	29	26	17	22	21
Texas	11	16	20	17	11	14	15	32	29	38	31	24	31	37
Utah	5	3	8	9	4	10	8	11	11	12	14	9	15	7
Vermont	0	2	0	1	1	2	2	6	2	2	1	3	1	1
Virginia	6	16	14	11	5	7	7	5	13	23	14	9	16	12
Washington	15	25	9	24	16	6	12	14	19	15	27	17	18	21
West Virginia	3	7	4	2	2	1	3	3	4	7	2	2	1	3
Wisconsin	14	51	41	31	29	19	20	34	44	30	33	22	31	44
Wyoming	0	0	0	0	0	0	0	0	1	1	0	3	0	0
	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958

medical students in the freshman class in 1960, and eventually will enroll a hundred students in each freshman class.

Data on the size of the medical student body in California's medical schools and on the number of graduates is given in Tables 4, 5, 6, 7 and 8. (At the time this information was asked, Stanford University School of Medicine was in the process of moving to a new campus and no data were available.)

In Table 9 are shown the states in which successful candidates for reciprocity license received their original medical education.

Acknowledgment is made with thanks to Mr. Wallace Thompson, executive secretary, California State Board of Medical Examiners for his help in compiling statistics.

University of California School of Medicine, Los Angeles 24.

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Carcinoma in Situ of the Uterine Cervix — Diagnosis by Biopsy

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• **In 50 cases of carcinoma in situ of the cervix uteri, the lesion was present in the cervical canal in 36 instances, but the squamous epithelium of the portio was involved in only 14 cases. Since single biopsy from the portio or external os may show no malignant change even in cases in which vaginal smears are positive for cancer, single biopsy is indicated only in the presence of gross suspicious lesions.**

When positive smears have been obtained, cold-knife cone biopsy is indicated (a) whenever gross lesions are not visible on the ectocervix, (b) if carcinoma in situ is found in a biopsy of the external os, in order to determine the presence or absence of invasion, and (c) when there are repeated positive smears and biopsy of the portio has not shown the presence of malignancy.

The technique of cone biopsy is given in detail.

THE MICROSCOPIC examination of small pieces of tissue from the cervix uteri was introduced by Carl Ruge in 1878 as the "only possibility of certain recognition of cancer." Biopsy still remains the most reliable method for positive diagnosis, but with the widespread acceptance of cytologic smears and the recognition of very early stages of carcinoma it appears that the indications for this procedure should be revised. In our experience a simple biopsy specimen taken from the portio often proves negative even though smears may be positive for cancer, and it then becomes necessary to perform a more extensive operation (cone biopsy) to demonstrate the existing lesion. The present report is based on the histologic study of 50 specimens of carcinoma in situ of the cervix in order to determine the most common site for this disease and to try to define the indications for biopsy of the portio and for cold-knife cone biopsy.

SITE OF LESIONS

Although it is generally accepted that cervical carcinoma most often begins at the "squamocolumnar junction," the disease is still regarded by many authorities as one that primarily involves the squamous epithelium of the portio. Younge and co-workers,[10,11] emphasized that in over 90 per cent of instances of carcinoma in situ, the cervix is abnormal, the abnormalities consisting of conditions described as erosion, eversion, ectropion and laceration. They recommended taking biopsy specimens from the external os at the six and twelve o'clock positions. Foote and Stewart[4] found that of 27 cases of carcinoma in situ ten were situated on the portio vaginalis, 14 on both the portio and within the cervical canal, but only three limited to the canal. Held[5] reported that only 2.5 per cent of in situ lesions were situated in the canal. Przybora and Plutowa[7] in a study of 100 cases noted that in only two were the lesions located "almost entirely" within the canal and in only three on the portio, while the remainder involved the external os and extended either over the portio or upwards into the canal, or involved both those areas.

The subject is controversial, however, other investigators having stated that in most cases the lesion originates within the cervical canal. Carson and Gall[1] in their study of a considerable number of specimens found that preinvasive carcinoma originated in the canal in every instance and only in two cases extended to the portio. Marsh[6] analyzed 83 specimens of complete cervices and found carcinoma on the squamous side of the squamocolumnar junction in two cases, on the columnar side in 35 cases, on both sides in three cases, and the location not determinable in 43 cases. Fennell[2] in a study of 118 cases found that the endocervical (gland-bearing) portion was involved in all cases, with extension to the portio in only 22 per cent. Thornton and co-workers[9] described an involvement of the endocervix or endocervical glands in 193 of 200 specimens, while in six the lesion was located in both the squamous and endocervical epithelia and in only one case in the squamous epithelium.

The details of the present series of 50 cases of carcinoma in situ will be reported later, but the material consisted of 42 specimens obtained by cone biopsy and eight by hysterectomy. The location of the carcinoma in situ was noted as involving (1) the squamous epithelium of the portio, (2) the

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columnar epithelium of the cervical canal, or (3) the *transitional zone*, a site (described previously[3]) that corresponds to the "squamocolumnar junction." It is an area 1.0 cm. or less in width in the lower part of the cervical canal at the upper extremity of the squamous epithelium. The data on the sites, given in Table 1, show that in this series carcinoma in situ occurred much more frequently in the cervical canal than on the portio. If the transitional zone is considered as part of the cervical canal, the lesion involved this area in 36 cases and was present on the portio in only 14 cases.

TABLE 1.—*Location of carcinoma in situ of the cervix uteri*

Location	No. of Cases
Portio vaginalis:	
Portio alone	2
Transitional zone and portio	3
Cervical canal:	
Transitional zone	17
Columnar epithelium (canal)	4
Transitional zone and canal	12
Portio, canal, and transitional zone	9
Canal, transitional zone, and "dysplasia" of portio epithelium	3
	50

INDICATIONS FOR BIOPSY

It is difficult to reconcile the contradictory findings in the two groups of investigators, those in one contending that most often carcinoma in situ occurs in the squamous epithelium of the portio while those in the other claim that the most frequent origin is the transitional zone and the columnar epithelium of the canal. The differences are so pronounced as to indicate the studies must have been of series in which the material itself was different in some particular characteristic. It is doubtful that the variation can be explained solely by the microscopic criteria for this kind of malignant lesion, although a great variability notoriously occurs in the evaluation of it by different pathologists. The difference more likely rests on the type of clinical material, and it seems probable that involvement of the portio is evidence of a more advanced disease which has originated in the canal. The distribution of the sites of involvement in the present series lends support to this belief.

The transitional zone must receive the first consideration in any biopsy examination. This area sometimes is visible just within the external os and especially in the gaping opening of the multiparous cervix, but often it lies 0.5 to 1.0 cm. up in the canal and cannot be reached for excision of a single specimen with knife or punch. The practice of obtaining single specimens at specified points in the circumference of the os has been successfully employed by many gynecologists, but this method can miss a small early lesion. The procedure of "curetting" the cervical canal is less than satisfactory because the irregularity of the grooves and rugae cause skipping and often the pieces of tissue are too small for proper study. It likewise gives no information as to the possible existence of invasion.

The only method for getting material that can give information regarding the whole circumference of the os as well as the canal and the portio is cold-knife cone procedure. However, this procedure requires hospitalization and the need for considerable operative skill by the surgeon as well as a thorough examination of the specimen by a pathologist. Secondary sequelae such as hemorrhage and cervical stenosis also must be considered. Hence the procedure should be used only under certain definite conditions, and the indications for it, as well as those for single biopsy, must be clearly understood. These indications appear quite definite *in any case in which vaginal smears are positive for cancer.*

1. A single (or multiple) biopsy with knife or punch from the region of the external os is the procedure of choice whenever there is a gross lesion visible on speculum or colposcopic examination. The term *gross lesion* as here used means not only ulcerations and papillary excrescences associated with cancerous growths, but all abnormalities described under such terms as *erosion, ectropion* and *eversion.* In spite of the benign appearance of such lesions they often harbor a malignant focus, and multiple biopsy (for example, four-quadrant biopsy) may be rewarding. The application of Schiller's iodine may be helpful in determining the most favorable regions for taking the material. Whenever an invasive carcinoma is demonstrated by this type of examination the diagnosis is established and the method of treatment can be selected.

2. The indications for cone biopsy, however, are more specific and it can be said that this operation should be conducted under the following conditions:

(a) Positive vaginal smears in the absence of gross abnormalities of the cervix. A carcinoma in situ often can be demonstrated in spite of the fact that the cervix appears entirely normal.

(b) The presence of a carcinoma in situ is demonstrated in single or multiple biopsy of the portio. In such cases, cone biopsy is essential because of the possibility of invasive cancer high in the cervical canal. (We have seen three instances of invasive cancer of the cervix with only in situ lesions on the portio. It also may be noted that in three cases of this series carcinoma in situ was present in the canal but only "dysplasic" lesions on the portio.)

(c) Repeated positive smears even though portio biopsies do not show the presence of malignant disease.

TECHNIQUE OF CONE BIOPSY

The operation of cold-knife conization is conducted in the hospital under anesthesia, for which pentothal sodium given intravenously is very satisfactory. The surgical preparation of the vagina is done with great care and with minimal swabbing or rubbing of the operative field lest some of the surface epithelium be dislodged. The cervix is exposed with right-angled retractors and drawn down with tenacula which are placed to the side far from the region of the external os. It is not necessary to use any special scalpel or instrument; a straight knife and scissors are adequate. It is very important that there should be no preliminary instrumentation of the cervical canal, although at times a fine probe may be inserted into the canal and left in place as a guide during the operation. A circular incision encompassing the external os and including any visible lesions (Figure 1, A) is made with a knife. As a rule a distance of 1.0 to 1.5 cm. from the os, which yields a cone with a base of 2.0 to 3.0 cm., is adequate. A preliminary painting with iodine as in the Schiller test may assist in delineating the boundaries of the abnormal external area for removal. The incision is carried upward and inward with knife or scissors (Figure 1, B) almost to the internal os; and this distance must be estimated from the size of the cervix and not by direct determination with a sound. At this point it becomes necessary to manipulate the tissue being removed, taking care to place the traction forceps in the cut surface, not in the mucosa. The portion of cervix removed is cone-shaped and should be from 2.0 to 3.0 cm. in length (Figure 1, C). With as little manipulation as possible it is split lengthwise in order to expose the canal and then is immersed in fixative solution, usually formalin.

Pregnancy should not stand against taking a cone biopsy, for the risk of rupturing the membranes and inducing abortion is far less than that of an overlooked invasive carcinoma. However, the procedure is more difficult because the tissues are soft, bleeding is harder to control and the incision must not be extended above the internal os.

After removal of the cone, the remaining cervical canal is dilated with Hegar dilators and curettage is performed. The bleeding in the raw area is controlled by tying or cauterizing the bleeding points. The deep defect in the cervix may be packed with oxidized cellulose or gauze and this is sufficient if the patient is to receive a radium treatment or

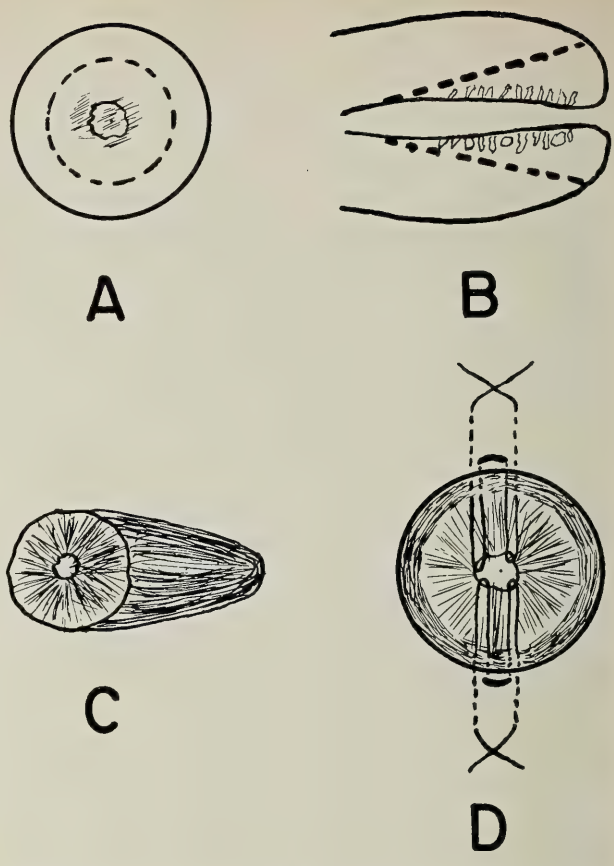


Figure 1.—Cone biopsy of cervix uteri. *A*, circular incision around external os. *B*, extent of incision upward almost to internal os and including most of cervical canal. *C*, cone. *D*, infolding of mucosa with Sturmdorf sutures.

hysterectomy in the near future. However, since it is usually impossible to make a decision at this time, it is better to cover the area with mucosa. The ectocervical mucosa is dissected back from the edge of the wound for a distance of 2.0 to 3.0 cm. and brought to the edge of the canal with an anterior and a posterior suture such as is used for a Sturmdorf repair of the cervix (Figure 1, D). To further assist in controlling the bleeding a vaginal pack is then inserted and is left in place 24 hours.

The preparation of the sections for microscopic study is important. They should be cut lengthwise 3 mm. apart and include the whole length of the specimen. As many as 6 to 20 sections are obtained to give a complete survey of the ectocervix, transitional zone and cervical canal, and include the whole thickness of the clefts (glands) as well as the deeper interstitial tissues.

The successful employment of this diagnostic procedure demands special attention to certain details which cannot be too strongly emphasized (Scott and Reagan[8]).

1. Gentle surgical preparation of the operative field.

2. Delineation of the external area for excision by the iodine (Schiller) test.

3. Avoidance of traumatization of the canal with dilators, sounds, special instruments or curette prior to cold-knife conization.

4. Avoidance of instrumental trauma to epithelial areas of the removed cone.

5. Dilatation of the remaining cervical canal and curettement of the uterine cavity after the conization.

6. Careful control of bleeding points and inversion of the mucosal fold into the defect caused by the removal of the cone.

7. Proper preparation of multiple blocks of tissue for microscopic examination.

SEQUELAE

Hemorrhage is the first complication that must be anticipated, but it does not often occur and usually can be controlled by a tight vaginal pack. Of more concern is profuse bleeding setting in ten days, more or less, after the operation. In either case, if it is not controlled by pressure packs the patient may have to be returned to the operating room. There, under anesthesia, the vaginal mucosa is dissected away from the uterus as in a cystocele repair and sutures are inserted on each side of the cervix to ligate the descending branches of the uterine artery. Fortunately so radical a step is rarely necessary, but there is on record one instance of continued bleeding necessitating total hysterectomy.

If hysterectomy or radiotherapy is decided upon, it is advisable to proceed with these measures within three or four days. The defect caused by excising the cone is readily infected, and although antibiotics are very useful the presence of an acute infection obviously renders further treatment more hazardous. If it is not possible to undertake further operations within this short time it is better to wait a month for complete healing.

In instances in which no malignant change is demonstrated and further treatment is deferred, it is wise to see the patient once a week for two months after the operation and to dilate the cervix with small Hegar dilators. Stricture of the cervical canal is a frequent complication, especially if the vaginal mucosa has not been turned in with a Sturmdorf suture. If the cone does not extend above the level of the internal os, this operation does not contraindicate future pregnancies and there is apparently no reason to anticipate a greater incidence of abortion.

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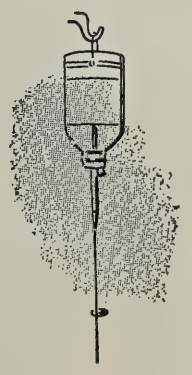
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Radiation: Registration of Sources

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• **Registration of sources of ionizing radiation, including x-ray machines and radioactive material used in the healing professions, is required by legislation recently enacted in California. Registration will provide information concerning the type and location of sources of radiation, and will provide a basis for the evaluation of a need for additional radiation control and protection measures in the future.**

As the medical uses of radiation procedures constitute a major portion of the total radiation exposure to the total population, it becomes increasingly important that physicians develop a reasonable and knowledgeable concept of not only the obvious benefits but also the actual and potential hazards of radiation as used in medicine. Practical and effective measures to minimize patient exposure, based on professional knowledge, competence and experience, with profession-wide participation and support, will insure the effective integration of the medical uses of radiation in the California Atomic Energy Development and Radiation Protection Program.

THE CALIFORNIA STATE Department of Public Health has been and will be actively concerned and involved in any radiation protection activities within the State, in that the Department has general responsibility and broad authority under the Health and Safety Code to protect the public health and safety. It also has the authority to investigate any conditions or circumstances which might affect the public health. Until recently, having no legislative directive for a broader one, the Department had been carrying on a limited radiation protection program. The activities included a limited environmental monitoring program to measure and evaluate the extent of radioactive fallout, the listing and distribution to other state agencies of Atomic Energy Commission (AEC) licenses in the State, limited studies of the extent of employee and general population exposure incident to the industrial uses of radiation, the evaluation of the use of radioactive tracers in studies such as stream and ground water measurements, and, on occasion, consultation to medical, dental and industrial users of radiation-producing machines and radioactive materials.

The Department's activities with regard to radiation protection were expanded in 1959 with the provision of a budget for additional personnel and equipment principally to expand the program of detection and evaluation of contamination of the environmental air, water, food and soil incident to radioactive fallout.

The California State Legislature in the 1959 session passed a bill which added Chapter 7.5 to Division 20 of the Health and Safety Code. This chapter is titled "California Atomic Energy Development and Radiation Protection Law."

Article 2 of the chapter is a declaration of policy:

25710. The Legislature finds and declares that the peacetime uses of atomic energy and radiation can be instrumental in improving the health, welfare and economic productivity of the people of the State of California if properly utilized, and may be hazardous to the health and safety of the public if carelessly or excessively employed. It is therefore declared to be the policy of the State to:

(a) Encourage the constructive development of industries producing or utilizing atomic energy and radiation and to eliminate unnecessary exposure of the public to ionizing radiation.

(b) Have state agencies retain their traditional jurisdictions wherever possible.

(c) Have various departments and agencies of the State which are concerned with atomic energy and radiation and its various applications develop programs designed to protect the people of the State from unnecessary exposure to radiation.

(d) Assure the coordination of the programs of the state agencies and the laws, rules and regulations incident thereto and to insure the coordination of these activities with the development and regulatory activities of local agencies, other states and the Government of the United States, including the Atomic Energy Commission.

Article 4 establishes in the Office of the Governor the position of Coordinator of Atomic Energy Development and Radiation Protection, and sets forth his duties and responsibilities. In general terms, the legislation directs that the Coordinator shall, with respect to atomic energy development and radiation protection, serve as advisor to the Governor, perform the liaison function between the state and federal governments, coordinate the programs and rules and regulations of state, city, and county agencies, keep the Governor and various state, city and county agencies informed and enlist their cooperation in protecting the health, safety and general welfare of the people of the State, and disseminate to the public factual data and information and interpretations thereof. The legislation further directs that the Coordinator shall submit a report to the Governor and the Legislature not later than ten calendar days following the commencement of each regular session of

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the Legislature, recommending such action or legislation as he deems necessary or desirable, and shall submit his first report to the Governor and the Legislature at the 1961 regular session, including but not limited to information and recommendations on:

(a) The environmental monitoring and surveillance program of the State relating to radiation.

(b) The adequacy of the radiological laboratory facilities of the State necessary for discharging the duties and performing the service required by state agencies, whether or not there should be a centrally located laboratory facility to service all state agencies, and if so where it should be located administratively, or whether it would be feasible for the State to contract with private organizations for any needed technical laboratory work.

(c) The need for a program for the inspection of sources of radiation within the State.

The Coordinator may consult with and seek the advice of technically qualified persons within and without the State to advise on matters relating to atomic energy and radiation protection, particularly with regard to rules, regulations and safety standards relating to radiation usage and exposure.

Alexander Grendon has been appointed and is serving as Coordinator in the office of the Governor at Sacramento.

Article 5 establishes in the State government the Departmental Coordinating Committee on Atomic Energy Development and Radiation Protection which shall consist of the Coordinator as chairman and the heads of the appropriate and interested state departments and agencies. The committee shall assist in the coordination and development of programs and activities pertaining to atomic energy development and radiation protection, and shall report thereon to the Governor.

Article 6 establishes in the State government an Advisory Council on Atomic Energy Development and Radiation Protection, consisting of the Coordinator and nine members appointed by the Governor, one each from industry, labor, medicine, education, science and technology, agriculture, insurance, city government and county government. The council shall evaluate the programs of the several state departments and agencies and advise and make recommendations to the Governor bearing on the development of state policy in the field of atomic energy development and radiation protection.

Article 7 makes it unlawful for any person to manufacture, construct, produce, transfer, acquire, use or possess any of the materials or facilities for which a permit or license is required under the provision of the Atomic Energy Act of 1954 (Public Law 85-256), unless he shall have first obtained such license. It also requires the State Department of Public Health to keep current information on the permits and licenses issued by the United States Atomic Energy Commission in the State, and to transmit such information to the Coordinator and, upon request, to any state department or agency or member of the public.

Article 8 entitled "Registration of Sources of Radiation" is quoted directly as follows:

25780. Any person possessing a source of radiation shall register with the Department of Public Health pursuant to rules and regulations which shall be promulgated by the Board of Public Health and shall give such information relating to such source of radiation as shall be required by such rules and regulations on forms to be prescribed by the Board of Public Health and furnished by the department. Violation of this section is a misdemeanor.

25781. The information obtained by registrations under Section 25780 shall be transmitted by the department to the Coordinator of Atomic Energy Development and Radiation Protection and shall be made available to state departments and agencies, city and county governments, and the public.

Assembly Bill 1403 became effective on September 18, 1959. The State Department of Public Health is now actively engaged in developing the rules, regulations and forms for registration of sources of ionizing radiation in consultation with professional societies and activities and other state and local agencies for consideration by the State Board of Public Health. It is estimated that these will not be adopted or available for distribution for several months. When available, the regulations and forms will be distributed through proper channels. As registration applies to all sources of ionizing radiation, all physicians and allied professional users of diagnostic and therapeutic x-ray machines and radium, and most AEC licensees who use by-product material for diagnosis and treatment must register. Registration will also apply to industrial and commercial users.

With the implementation of the new California Atomic Energy Development and Radiation Protection Law, the activities and responsibilities of the Department will be greatly expanded. The Department will be concerned with the public health aspects of ionizing radiation from all sources including natural background, the environmental contamination incident to fallout, nuclear power installations, radioactive waste disposal and occupational exposure. The Department will also be concerned with the public health aspect of the patient exposure incident to uses in diagnosis and therapy.

The somatic hazard to the individual and the genetic hazard to the future population as a whole from any source or amount of ionizing radiation is generally acknowledged. It is generally believed that the genetic hazard is the more significant. The amount of genetically significant radiation contributed by medical exposure of patients is most difficult to measure or estimate, but it is generally agreed that medical uses contribute an amount equal to the natural background dose and that radioactive fall-

out and occupational exposure in radiation industries each contributes less than 5 per cent of the dose from either medical uses or natural background. It is apparent that the medical exposure of patients is potentially of major importance. It is generally agreed that the amount thus received can be significantly lowered by reasonable and practical measures without in any manner decreasing the obvious benefits to patients and society as a whole. This can be accomplished by profession-wide recognition of the actual or potential hazards of radiation, by the use of good equipment and good practice, and by limitation of the numbers and types of procedures to the actual demands of the medical situation.

The registration of sources of ionizing radiation with the State Department of Public Health will serve primarily as a source of information concerning the number, types and locations of sources. The registrant "shall give such information relating to such source of radiation as shall be required by such rules and regulations on forms to be prescribed by the Board of Public Health and furnished by the Department." Information concerning the extent and status of any radiation control measures currently employed by each registrant at the time of registration would be of great future value in evaluating the need for any expansion of the present radiation protection program of state and local government agencies, to include standards of equipment, shielding, etc. Such information might include data concerning the use of filters and collimating devices to minimize patient exposure, and the use of protective screens, primary shielding in walls and individual monitoring devices. Information of this type would be of value to the state agencies and the Coordinator in the required future recommendations to the Governor and the Legislature concerning the need for a program for the inspection of sources of ionizing radiation within the State.

The Division of Industrial Safety of the California State Department of Industrial Relations administers and enforces laws and safety orders relating to the life and safety of workers in places of employment, including the hazards of ionizing radiation to employees. These orders do not apply to patients, but do apply to those employees of physicians and hospitals who might be exposed to potentially injurious levels of ionizing radiation. The safety orders pertaining to the hazards of radioactivity and ionizing radiation to employees are published as Title 8, Group 6, Article 53, California Administrative Code. These safety orders, adopted in 1950 and amended in 1955, establish minimum standards for protection of employees, and specify maximum permissible exposure limits for employees. The safety orders establish requirements in protective measures such as the monitoring of workrooms where radioactive material is handled, and the inspection and survey of radiation-producing equipment.

The Atomic Energy Commission has published regulations which establish general standards for protection of licensees, their employees and the general public against radiation hazards arising out of the possession or use of special nuclear material (source or by-product) under license issued by the Atomic Energy Commission. Physicians licensed by the AEC must comply with the regulations and are subject to inspections and enforcement provisions.

The National Bureau of Standards handbooks relating to radiation, particularly Nos. 51, 59, 60, 69, set forth the recognized standards of radiation protection measures as they apply to equipment design, to equipment maintenance, to shielding of walls and to the maximum permissible doses for employees and for the general population outside of but in the vicinity of controlled radiation areas. The standards are published as a guide. However, most "standards" and "codes" relating to radiation protection as actually adopted by official agencies of the federal government and many states are based on and comply with the recommendations of the National Committee on Radiation Protection and Measurements. The publications listed do not apply to radiation intentionally applied to patients.

Since the question of patient exposure to radiation has come to the fore as a matter of general public and professional concern, numerous articles on the subject have appeared not only in the professional medical publications but also in allied scientific publications and in popular magazines. Many of them have attempted to evaluate the extent of any potential or actual health hazard from the careless or unnecessary use of radiation procedures. Numerous other articles, many of which have been published in radiology journals, have discussed such measures as limitation of the beam and refinement of procedure techniques as a way to reduce "unnecessary exposure of the patient." It appears to be particularly essential at this time that all members of the medical, dental and allied professions, whether prescribing, requesting or actually conducting diagnostic or therapeutic x-ray procedures be reasonably familiar with the general subject of ionizing radiation so that they may better judge whether the apparent or expected benefits of any radiation procedure will justify the recognized hazard of the procedure. Medical practice based on reasonable information and on practical scientific protective measures appears to be a prerequisite to a sound radiation control program, whether voluntary or regulatory.

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Palliation for Advanced Cancer of the Breast

Trans-Septal-Sphenoid Subtotal Hypophysectomy

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• **Subtotal hypophysectomy by the trans-septal-sphenoid approach was used for palliation in 23 cases of cancer of the breast. Of 18 patients in whom results could be evaluated, eight had palliation for various lengths of time. The other ten were not helped and four of them had complications from the operation. The average survival time for patients who were helped by the operation was longer than for those who were not.**

In recent years it has been amply demonstrated that the course of cancer of the breast can be modified by a change of hormonal milieu in the patient.* Of special interest was the report by Pearson and Ray of the stimulation of the tumor growth in two such cases by the administration of human growth hormone.[20]

With the advent of hypophysectomy as a palliative procedure in advanced carcinoma of the breast, it was logical to attempt this operation by the trans-septal-sphenoid approach. This is a report of the use of this operation in 23 cases. The technique, described in a previous article,[10] is basically that devised by Hirsch. Local anesthesia is used. Because of the innate limitation of the procedure, only a subtotal hypophysectomy was feasible by this approach.

CLINICAL MATERIAL AND RESULTS

Of the 23 patients treated, five should be excluded in the evaluation of results. In Case 1 (Table 1) the patient was unconscious and moribund at the time of operation. In Case 4 the operation was not completed. The patient had a very curved intersinus sphenoid partition which misled the surgeon (WEH). Removal of the postero-superior bone of the sphenoid supposedly exposed the pituitary. Fortunately, before using the cup-forceps to remove this tissue, a routine aspiration with a long needle was done and gross blood was withdrawn. The operation was stopped, without harm to the patient except for having been subjected to an extended submucous resection of the nasal septum. At autopsy a few months later it was noted that the right internal carotid artery had been exposed. As advanced hepatic metastasis was also present, hypophysectomy probably would not have helped anyway. It usually does not if liver or brain metastasis has occurred. In Case 18 an anomalous artery across the face of the pituitary prevented safe removal of hypophyseal tissue. The patient in Case 16 died of coronary occlusion a month postoperatively, and another patient (Case 17) died of a stroke a month after operation.

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*References: 1, 2, 4, 5, 16, 19, 21.

In neither case, therefore, could the effect of the procedure be adequately evaluated.

Eight of the remaining 18, we believed had subjective palliation and ten did not (Table 2). Of the eight considered helped, the shortest length of postoperative survival was three months (the patient still living at the time of this report) and the longest was 15 months. The average was at least seven and a half months, and the median was seven months.

Of the ten not considered helped, the shortest postoperative survival time was one month, the longest five months, the median two and a half months.

Relief of pain was the most dramatic feature of the palliation. One patient (Case 2, Table 1) was rapidly deteriorating from the disease. After operation she gained strength and became free of pain. Before her seven-month period of survival ended she enjoyed two vacations in resort spots, trips she could not possibly have made before operation. The patient in Case 13, a 37-year-old woman, could barely hobble using two canes before operation. Postoperatively she was able to resume the care of her home, and survived 15 months.

COMPLICATIONS

Four of the patients had complications, one case each of meningitis, chronic diabetes insipidus, chronic cerebrospinal fluid rhinorrhea and cerebrospinal rhinorrhea with pneumocephalus. In the latter case the resident surgeon, having had considerable experience in operations of this type, had attempted extensive (total if possible) removal of pituitary tissue. As a secondary operation he stopped

the cerebrospinal fluid rhinorrhea by swinging a pedicled-flap of mucosa from the nasal septum into the sphenoid. The intracranial air gradually absorbed.

DISCUSSION

A variety of surgical approaches have been used for hypophysectomy and for the insertion of radioactive materials into the pituitary.* Investigators at the Memorial Center in New York City, reporting on a large series in which complete hypophysectomy was effected by craniotomy, noted long duration of palliation and survival, and objective signs of remission.[3,20]

*References: 6, 7, 8, 9, 11, 12, 13, 14, 15, 17.

In light of evidence recently presented by Müller[18] on the "activation" of the pharyngeal hypophysis when the sellar pituitary is absent or destroyed,

TABLE 2.—*Results of Trans-Septal-Sphenoid Hypophysectomy for Palliation of Cancer of the Breast*

Total number of cases	23
Exclude Nos. 1, 4, 16, 17 and 18 (See Table 1)	5
Number of cases to evaluate	18
Palliation:	
Yes	8 (44 per cent)
No	10 (56 per cent)
Operative mortality	0
Complications:	
Meningitis	1
Chronic diabetes insipidus	1
Chronic cerebrospinal fluid rhinorrhea	1
Pneumocephalus and cerebrospinal fluid rhinorrhea	1

TABLE 1.—*Summary of 23 Cases in Which Trans-Septal-Sphenoid Subtotal Hypophysectomy Was Done for Palliation of Mammary Cancer*

Case No. Patient	Age	Length of Postoperative Survival	Palliation	Complications	Amount of Tissue Removed	Comments
1.	55	1 day			950 mg.	Moribund preoperatively; previously reported.
2.	57	7 mo.	Yes		Not weighed	
3.	38	5 mo.	No		250 mg.	Brain metastases.
4.	47					Operation interrupted; technical error.
5.	49	13 mo.	Yes		Not weighed	
6.	43	1 mo.	No		275 mg.	Extensive liver metastases.
7.	56	2 mo.	No		Not weighed	
8.	33	4 mo.	Yes		Not weighed	
9.	51	1 mo.	No	Meningitis	250 mg.	
10.	34	7 mo.	Yes		Not weighed	
11.	36	3 mo.	No	Chronic diabetes insipidus	185 mg.	Tremendous bowel metastases.
12.	48	5 mo.	No	Chronic cerebrospinal fluid rhinorrhea	295 mg.	
13.	37	15 mo.	Yes		130 mg.	
14.	33	4 mo.	No		Not weighed	
15.	45	2 mo.	No		Not weighed	
16.	67	1 mo.	Could not evaluate		795 mg.	Died coronary occlusion.
17.	59	1 mo.	Could not evaluate		505 mg.	Died of stroke; BP 210/100 mm. Hg.
18.	31					Operation interrupted; arterial anomaly.
19.	35	1 mo.	No		262 mg.	
20.	56	8 mo.	Yes		400 mg.	
21.	59	3 mo.	No	Pneumocephalus cerebrospinal fluid rhinorrhea	500 mg.	Cerebrospinal fluid leak stopped by mucosal flap.
22.	33	5 mo.	Yes		Not weighed	
23.	56	3 mo., living	Yes		150-200 mg.	

the pharyngeal hypophysis may someday be given greater consideration than it gets at present.

On microscopic examination, the surgical specimens from two of the patients in the present series were observed to contain small islands of metastatic tumor.

In an attempt to eradicate additional pituitary tissue not removed surgically, we have swabbed the interior of the cavity with Zenker's solution. The possibility of re-operation, when palliation from the primary operation appears to be ending, to remove additional or regrown tissue, has been considered but not tried.

Since the technical error which occurred in Case 4, we have routinely obtained preoperative body section roentgenograms of the base of the skull (laminagrams), to show the plane of the sphenoid intersinus partition from front to back, as an additional operative guide.

Keeping in mind the limitations of this approach, as well as the possibility of anatomic peculiarities in each patient, the surgeon ought not be too zealous in his removal of pituitary tissue.

Recently Luft[15] reported that in most of the European centers and in some in the United States a trans-antral-sphenoid approach, under general anesthesia, is being used for hypophysectomy. Apparently the exposure is sufficient to permit safe total hypophysectomy; and while the method is more formidable than the trans-septal-sphenoid approach, it is not as hazardous as craniotomy for the severely debilitated patients.

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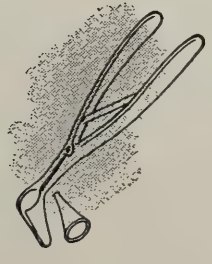
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Leg Cramps

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• **Foot and leg cramps are among the most frequent complaints presented by patients of both sexes, especially older persons. Similar cramping may occur in the thighs or in other skeletal muscles of the extremities and trunk. Foot and leg cramps usually occur after unusual exertion or during sleep. "Nocturnal leg cramps" may be of sufficient intensity to prevent sleep. "Pregnancy cramps" are particularly distressing.**

Effective treatment of foot and leg cramps requires an understanding of the etiology, pathophysiology and diagnostic techniques. Weight reduction and improved diet are essential. Among the useful supplementary medications are calcium lactate or gluconate, vitamin-mineral supplements, sympathetic blocking agents, vasodilators, ataraxics, muscle relaxants, quinine, hydrochloride, antihistamines, and nonmercurial diuretics.

Improved foot care and correction of foot imbalance is usually required. Edema and venous insufficiency are improved by elastic support, by repeated foot elevation for massages, by manipulations and exercises and by the use of diuretics. There may be need for operations on the veins and for sclerotherapy. Patients with arterial insufficiency are often benefited by lumbar sympathetic blocks with long-acting anesthetics and intra-arterial injections with relaxants, vasodilators, thrombolytic enzymes and anticoagulants. Sympathectomy, angiography and reconstructive arterial operations are indicated in only a small proportion of patients with foot and leg cramps.

THE TERM *leg cramps* applies to involuntary tetanic contractions of the calf muscles. Such cramping may be experienced by any patient. An example is the so-called "charley horse" following stretching of a fatigued or injured extremity, or after the leg has been held in a cramped position for a time. Similar cramping may occur in the feet or in other skeletal muscles of the trunk or the extremities.

ETIOLOGIC AND PATHOPHYSIOLOGIC FEATURES

The causes of many cases of foot and leg cramps are obscure. Practically anything that interferes with nutrition and gas exchange of normally innervated skeletal muscle can cause cramps. Thus cramps are seen both in sodium intoxication and sodium depletion, in oxygen intoxication and oxygen deficiency. Cramps occur more frequently in association with certain diseases or conditions:

During or after unusual activity or muscular effort.

After retiring or during sleep following a day of much use of the legs — that is, "nocturnal leg cramps," which may be so severe that they awaken the patient or prevent sleep.

"Pregnancy leg cramps," occurring between the 24th and 36th weeks of gestation.

Disturbances of mineral metabolism, frequently related to dietary and vitamin deficiencies. (a) Hypercalcemia may produce cramps through peripheral sympathetic overactivity causing vasoconstriction. Cramps are far more commonly associated with hypocalcemia—latent tetanic states, hypoparathyroidism, sprue, rickets, renal insufficiency and alkalosis in hyperventilation syndrome. Calcium ions, which are skeletal muscle relaxants, are reduced by phosphates and in turn antagonize the relaxant effects of magnesium and postassium ions as well as the muscle stimulant effects of sodium ions. (b) Chronic low sodium diet also may lead to cramps, especially when sodium-depleting agents are being used or in association with excessive sweating.

Weakness in a neighboring muscle due to nervous system disease or to skeletal deformity.

Circulatory deficiencies, such as those occurring with atherosclerosis, vasospasm, varicose veins, or thrombophlebitis of the lower extremities. Older patients are more likely to have nocturnal cramps than are younger patients.

Spontaneous fasciculation is more frequently observed in muscles likely to cramp than in normal muscles. There appears to be a heightened excitability of the motor units involved. Even during maximal voluntary effort the motor units contract asynchronously. With even maximal voluntary contraction no pain is experienced. Pain can be elicited during electrical stimulation of the muscle or motor nerve which induces much greater muscle tension than voluntary contraction.

During voluntary contraction the normal muscle fiber has a contraction rate of 10 to 50 per second; in the myotonic muscle this rate may be higher, 100 to 150 per second. In skeletal muscle cramps, the rate of contraction of a single fiber is still higher, reaching to 300 per second.

The sensory elements and nerve fibers subserving

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the conduction of afferent impulses from the muscles which are interpreted as pain are not clearly identified. The excessive tension developed in the muscle may cause afferent impulses to arise in a manner analogous to pain production when a viscus (intestine, urinary bladder, gall bladder) is distended.

MANAGEMENT OF FOOT AND LEG CRAMPS

After adequate examination to attempt to determine specific etiological factors a multiple therapeutic routine should be instituted.

Diet

He who takes medicine and neglects diet wastes the skill of his physician.
—OLD CHINESE PROVERB

Reduce overweight. A low calory, low fat, low carbohydrate, low salt, high protein diet is essential. Saturated, hydrogenated solid fats are to be avoided. Linolenic acid, linoleic, and arachnoidic polyunsaturated fatty acids, found in cottonseed, corn, walnut, peanut, safflower and sunflower seed oils are currently popular. Varying success has been achieved with cholesterol-reducing and lipotropic agents (hyaluronic acid, sitosterols and niacin). Inhibition of cholesterol biosynthesis may prove more effective in retarding atherosclerosis.

Reduce whole milk intake. Powdered, low-fat milk and soya derivatives may be used freely. Food should be eaten slowly and chewed thoroughly.

Medications

Qui medice vivit, misere vivit.
—MEDIEVAL LATIN

Many drugs have been advocated for prevention and treatment of muscle cramps. Addictive analgesics should be avoided. Except in frank calcium deficiency, medication should be considered as palliative and supplementary.

Mineral vitamin supplements high in vitamins B, C, and D should be prescribed routinely. In pregnancy and lactation adequate calcium is necessary to replace the large amounts taken up by the fetus or lost in nursing the infant. Calcium lactate or gluconate (0.6 gm. four times a day), or Calglucon® syrup, 1 tablespoonful (3.6 gm.) at bedtime. In severe spasm, calcium gluconate given intravenously often provides prompt relief. The rationale of low phosphate intake is still debatable.

Nicotinic acid (or nicotinamide) in repeated doses or in a form that releases slowly for sustained effect produces cutaneous vasodilation and has considerable lipid-clearing action. Apparently by elevating the diphosphopyridine nucleotide concentration in the body tissues, nicotinic acid also potentiates the action of ataraxic agents.

Some muscle relaxants are effective in decreasing the frequency, duration and severity of foot and leg cramps. Among the most effective and nontoxic agents is Orphenadrine hydrochloride (Disipal®) 25 mg. twice a day or, for nocturnal cramps, 50 mg. at bedtime.

Ataraxic drugs (tranquilizers) and antihistamines may be of indirect benefit but should be used only in small doses and for short periods. The central depressant action that sometimes accompanies the use of muscle relaxants, ataraxics and antihistamines may be combatted with monoamine-oxidase inhibitors (MAOI) such as 2-dimethyl aminoethane (Deaner®), 25 mg. twice daily.

Sympathetic and adrenergic blocking and adrenolytic agents may be indicated in patients with peripheral vascular insufficiency. There is need for improved preparations with regional specificity and less hypotensive effect.

Diuretics are indicated for edema. Small doses of renal carbonic-anhydrase inhibitors (hydrochlorothiazide) are preferred for their greater selectivity in eliminating sodium rather than potassium ions.

Quinine hydrochloride has long been used but its prophylactic and therapeutic value in leg cramps has not been conclusively established. Pregnancy, tinnitus and impairment of hearing or vision are contraindications to its use.

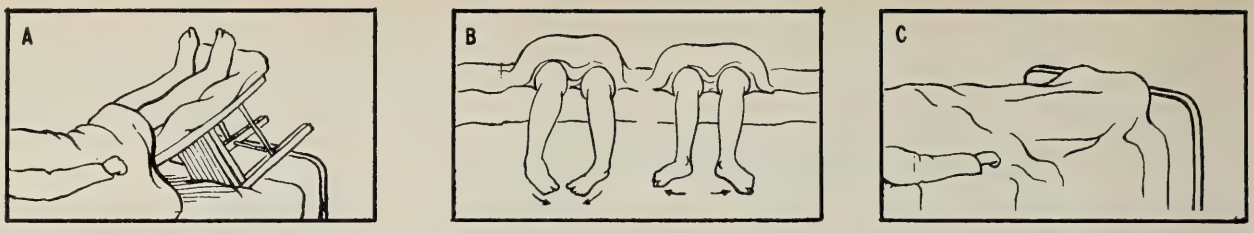
Foot Care, Physical Therapy and Other Measures

Keep your mouth wet, feet dry.
—POOR RICHARD'S ALMANAC, 1733

Foot Care. Fungus infections can be controlled by a nonirritating agent such as borotannic complex. Proper treatment of corns and calluses and clean socks and good shoes are essential. Warm soaks and contrast sprays should be taken at least twice daily. Massage with a vasodilator ointment, muscle stretching exercises and exercises against increasing resistance should be carried out many times every day.

Foot Balance. For depressed metatarsal heads insert, a ⅛-inch to 3/16-inch sponge rubber metatarsal pad. For internal rotation, a sponge rubber scaphoid "cookie" and ⅛-inch inner wedges on a Thomas heel and sole should be used. Pronounced foot imbalance requires a soft, flexible appliance, individually fitted by an expert orthopedist or podiatrist.

Physical Therapy. In the presence of vascular insufficiency, it is dangerous to use diathermy, heat lamps, ultra violet lamps, paraffin baths, ultra sound, vibrators and similar devices on the foot or leg. Careful use of sine wave, iontophoresis, rocking bed and repeated hydromassage, warm (not hot) baths and soaks and contrast sprays is encouraged. An



2 minutes 3 minutes 2 Minutes

Buerger-Allen exercises—Fields' Modification

electric pad set at low temperature applied to the buttocks in the lumbar region provides some foot and leg comfort through reflex vasodilations and reflex muscle relaxations.

Venous Insufficiency. Elastic support (bandage or stocking) and foot elevation (5 minutes every two hours) for massage, manipulations and exercises are usually of considerable benefit. With edema, low salt diet and diuretics (hydrochlorothiazide) and a continued self-care routine (Luke's "New Life"*) are essential. Sclerotherapy should be reserved for minute venules after operation. Pregnancy is usually a contraindication to sclerotherapy. Vein ligations and strippings may be indicated. The postthrombophlebitic syndrome is often benefited by some of the measures noted below for dealing with arterial insufficiency.

Arterial Insufficiency. Vascular study may indicate the need for lumbar sympathetic blocks (with long-acting local anesthetics), intra-arterial vasodilator-relaxants (methocarbamol), thrombolytic enzymes (Plasmin), oxygen and anticoagulants. Some patients require sympathectomy, angiography and reconstructive arterial surgical procedures. It is suggested that some patients with foot and leg cramps due to vasospasm, arterial or venous insufficiency and other causes will be benefited by "stunning" the lumbar sympathetic trunk with proton beams or with an insulated percutaneous electrocoagulator.

Associated Disease. Control of obesity, undernutrition, anemia, diabetes, cardiovascular-renal disorders and other systemic diseases is essential.

Foot and Leg Exercises

> *Those who do not find time for exercise will find time for illness.*
>
> —EARL OF DERBY, 1873

Instructions for foot and leg exercises are:

1. Exercise slowly. Relax slowly. Repeat exercises six times daily. Shorten rest periods and increase walking and exercises to a point short of severe pain.
2. After each exercise session manipulate and massage each leg and foot for five minutes with vasodilator ointment, or liniment diluted in oil. Apply dusting powders.
3. Keep off feet for five minutes every hour. If there was previous serious infection increase rest period to fifteen minutes. Do not bear weight if skin is broken or inflamed.
4. Flex and extend toes slowly to full range 1,000 times. While doing back and leg exercises continue with foot and toe movements.
5. Finish each step on toes, not on ball of foot. Take shorter steps and slower rate (90 steps per minute). If only one leg is involved, hold it stiff, throwing weight onto sound limb for longer intervals.
6. Lie flat on back. With knees stiff, elevate alternately right leg then left to 90°. At the same time do foot and toe bending. Repeat 10 times. Do bicycle exercises for 30 seconds. Repeat leg raising with a five-pound weight across foot; increase to 20 pounds for 20 elevations. Repeat lift, with knees flexed, sitting on edge of table.
7. Go swimming as often as possible. Twice daily relax in warm bath and use contrast sprays. Massage, and manipulate toes, feet, and legs while in warm bath. Hydrotherapy stimulates circulation and "tones" up tissues.
8. Buerger-Allen Exercises — Fields' Modification (see illustration):
 - Lie flat on back in bed and elevate legs to 45° for two minutes or until feet become blanched.
 - Sit on edge of bed and allow legs to hang for three minutes or until feet become pink. Move feet up and down, in and out, and open and close toes. Massage and manipulate toes, feet and lower legs.
 - Rest on back in bed for two minutes. Keep warm with blankets. Repeat exercises six times at each session six times a day.

523 West Sixth Street, Los Angeles.

*Luke's "New Life" (a term introduced by Joseph Luke of Montreal) is a routine of daily living for persons with edema and postthrombophlebitis. It entails weight reduction, elastic support and repeated elevation of the legs.

Clinical Observations on Iproniazid In Idiots with Epilepsy

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• In contradistinction to the observation made before that iproniazid has a potentiating effect on certain amines in guinea pigs, human studies have shown that this effect has very little clinical importance, when both the amines and the amine oxidase inhibitor are given in the usual therapeutic doses. However, neither in man nor in the guinea pig pretreatment with iproniazid showed a potentiating effect on amines which are not substrates of monoamine oxidase (ephedrine and amphetamine). Patients with epilepsy and allergic disease may receive iproniazid.

THE LITERATURE on iproniazid (1-isonicotinyl, 2-isopropyl hydrazine) has established that this enzyme-inhibitor has therapeutic usefulness apparently owing to selective action on the brain. Its effect in this organ is ascribed to the blocking of amine oxidase responsible for the degradation of norepinephrine and serotonin (5-hydroxy-tryptamine). The increase of these amines in the brain is reflected in greater alertness and energy of the patient. The mechanism of the observed anabolic action of iproniazid and its appetite-stimulating effect remains to be determined.

Some theoretical contraindications could be considered while utilizing iproniazid. (a) One might hesitate to use this drug in epilepsy where it might produce convulsions as other hydrazides do. The manufacturer of iproniazid (Marsilid®) cautions against the use of the drug in epileptic persons. Pfeiffer and co-workers[3] observed that iproniazid is probably not a convulsant in man; it does not lower the threshold for photic stimulation. (b) It has been observed by the author[2] that in guinea pigs iproniazid has a potentiating effect on certain amines. One might hesitate therefore to administer this drug to patients receiving such amines. (c) Another possible consideration is speculative: by blocking of monoamine oxidase and to a lesser degree di-amine oxidase, the body level of serotonin and histamine might increase and cause ill effects in patients with allergic disorders.

The purpose of this communication is: to report on clinical observations on iproniazid as far as the above-mentioned theoretical contraindications are concerned, and to present observations on changes in the gastric juice following iproniazid administration.

MATERIALS AND METHODS

Under ideal conditions human experiments would approach in their objectivity similar experiments in animals, free from patient's motivation, his intelligence and his reaction to the placebo role of the drug. The mentally retarded patients of Pacific State Hospital were found therefore more suitable for the present investigation than persons of normal intelligence.

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Two groups of hospital patients were investigated. One was made up of bed-ridden idiotic females and the other of chair-confined idiotic males. All had epilepsy. The ages varied between 12 and 38 years. Iproniazid was administered to all of them for a four-week period in doses proportionate to body weight. The lowest dose was 30 mg. daily and the highest 150 mg. daily and the drug was usually given in two or three divided doses before meals. No change was made in whatever medication the patients were receiving before iproniazid administration was begun. It included anti-epileptic drugs which the patients had taken for years (phenobarbital, Tridione®, Diamox®, Dilantin®), vitamins and antibiotics when indicated. Two females and three males known to be severely epileptic received additionally during the iproniazid administration, 25 mg. of pyridoxine twice a day. Two male patients received 25 mg. of ephedrine three times daily within an hour following iproniazid; and three other male patients received, in a similar way, amphetamine, two of them 10 mg. three times daily and one 5 mg. three times daily. The type of food and way of administration (tube feeding in some patients) was not changed. The patients were weighed before and at the end of administration of iproniazid, and one month after it was discontinued. The gastric juice of selected patients was examined for total acidity and for free hydrochloric acid simultaneously with the weight determination. Excepting week-ends, the behavior of the patients was observed daily. Blood pressure determinations were made at the beginning and at the end of iproniazid administration. Urinalysis and routine determination of blood cell counts were performed at random and as indicated by intercurrent illness. Additionally, five mentally normal

patients in private practice receiving 50 mg. iproniazid a day while under treatment for various allergic diseases were observed for about four weeks.

RESULTS

In none of the patients was an increase in intensity or frequency of epileptic seizures observed. In some, iproniazid seemed to have a mild anticonvulsive action. The incidence of convulsions is usually reported by the technicians in charge or by nurses to the ward physician. Both the day and night personnel were aware of the fact that a new drug was used and were on the lookout for possible convulsions. None of five patients who were given sympathicomimetic drugs during iproniazid administration and none of another group of five patients not included in this study who were receiving amphetamine (to counteract the drowsiness effect of antiepileptic drugs) showed a potentiating effect of iproniazid on the amines. The criteria for evaluating the potentiating effect of iproniazid on the action of these amines were clinical observation of tachycardia, blood pressure changes and other symptoms described previously.[2] The amines were given in usual therapeutic dosages.

The effect of the drug on three female patients with rhinitis was hard to appraise, since it was administered together with Chlor-Trimeton®, which was already being given when iproniazid administration was begun. However, the addition of iproniazid did not aggravate the rhinitis. The degree of rhinitis was evaluated by observations of the quantity of secretion and degree of nasal stuffiness. In two institutionalized female patients, not in the above group, recovering from an acute attack of asthma, the addition of iproniazid in a dose 50 mg. three times daily did not aggravate the asthma. Given to five patients with allergic disease in private practice, iproniazid did not result in worsening of symptoms. One of those patients, a 70-year-old woman with Meniere's syndrome, seasonal rhinitis and dermatitis felt a definite improvement in every respect after she took iproniazid. Another patient, a 73-year-old retired newspaperman who was taking Marsilid®, had cessation of asthma, for the first time in 30 years, following the anti-asthmatic treatment. His body weight, which had remained unchanged for many years, increased 8 pounds within six weeks (from 135 to 143 pounds). Also his general well-being improved. The effects in the other three younger private patients were not so striking.

The changes in gastric acidity of patients in the female group were not very significant. But in some cases in the male group there appeared to be a rise in total gastric acidity as a result of the drug and, parallel to it, a rise of free hydrochloric acid. Although lowered after discontinuation of the drug, in the cases in which the gastric acidity had risen during iproniazid therapy, it remained quite high one month after cessation of iproniazid. Changes in the body weight in this group did not seem to be inordinately associated with the apparent changes in gastric juice.

There were no changes in blood pressure readings or in blood cell counts as a result of iproniazid administration. We had the impression that some patients, although they did not show the clear-cut anabolic effect of the drug, ate better—did not turn away the head from the spoon or stubbornly clench the jaws—and became less of a "feeding problem." Managing those patients became an easier task, since their alertness and interest in surroundings increased and therefore better communication could be achieved. They would, for example, focus their eyes on a person, or smile—which they did not do before the treatment. Following the substitution of vitamin B complex tablets for the drug, for appraisal of placebo effect, those patients who showed an increased alertness lost it again in a few weeks.

In some patients an increase in muscular activity was noted. This became striking in one patient, a 26-year-old female, a "vegetable," who had not moved for a long time. While receiving iproniazid she began to be so active that side rails had to be put on her bed to keep her from falling out.

The undesirable side effects of iproniazid noted in these patients were as follows: Insomnia in one hydrocephalic female, and diaphoresis, especially facial, in another. Rebellious attitude instead of the usual passive cooperation was observed in two male idiots. In another group of mentally deficient young boys not included in this study who received iproniazid for several months it was noted that two hyperactive, imbecile schizophrenics improved upon discontinuance of the drug. They began to eat better and appeared somewhat calmer.

DISCUSSION

It seems that Pfeiffer was right in his belief that iproniazid was probably not a convulsant in man. When administered in therapeutic doses it did not provoke or accentuate attacks in epileptic patients. Even in patients with severe epilepsy who were receiving pyridoxine, iproniazid seemed safe. The potentiating effect of iproniazid on amines seemed to have very little clinical importance when both were given in the usual therapeutic doses. Allergic disorders such as asthma, atopic rhinitis, sinusitis, dermatitis or Meniere's syndrome did not seem to be aggravated by iproniazid. In order to determine the value of iproniazid in the treatment of allergic disease, more extensive studies are necessary.

Brody[1] noted that iproniazid in a single oral or intravenous dose resulted in gastric stimulation. Nicotinic acid and its derivatives were observed to promote gastrointestinal function. Should further experiments confirm the observation that an increase in total acidity and in free hydrochloric acid results from iproniazid administration in some patients, a better understanding of gastric secretion might be gained.

One might hypothesize that the control of the production of gastric juice is located in the reticular-activating system of the brain stem, the area in which amine oxidase can be affected by such substances as its inhibitor, iproniazid. It remains to be determined which amines bring about changes in secretion of gastric juice. Should serotonin play a dominant role in this control, its action, in the present state of knowledge, has to be considered a "central" one. Udenfriend and co-workers[4] showed that the brain is the only selective site where iproniazid has the effect on endogenous serotonin. Still to be explained would be why some patients respond to iproniazid with increased gastric acidity and others do not.

CONCLUSIONS

1. In the doses indicated in the present study, iproniazid may be given to patients with epilepsy, to patients receiving sympathicomimetic amines such as ephedrine and amphetamine in usual doses, and to patients with allergic disease.

2. The physiologic effects noted following administration of iproniazid in this group of patients included: No intensification of convulsive seizures, apparent increase in free and total gastric acidity in some male patients, increased muscular activity, and little if any change in the vascular system.

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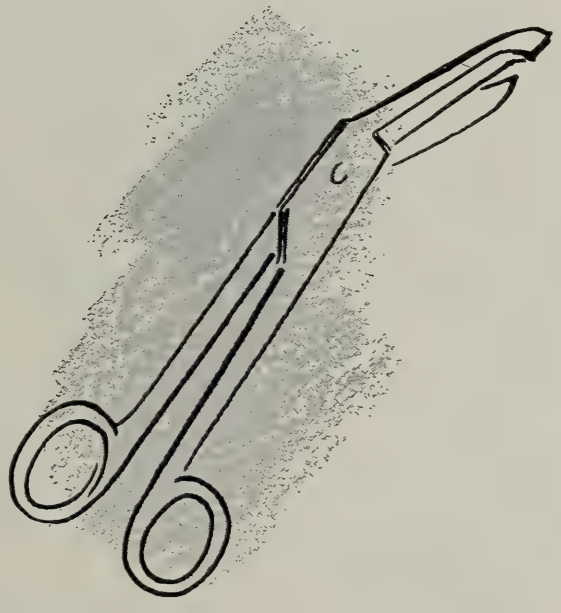
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Transection of the Pancreas by Blunt Trauma

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• If a diagnosis of traumatic pancreatitis is made and the patient does not improve clinically during the first 24 hours, transection of the pancreas should be suspected. If this is found to be the case at operation, the distal pancreas should be resected and the proximal end of the pancreas closed carefully with interrupted mattress suture of non-absorbable suture material. Particularly, the pancreatic duct should be ligated to prevent the formation of an external fistula. Any attempt at reapproximation of the transected pancreas will invariably result in an external pancreatic fistula if the patient survives the immediate postoperative period.

TRAUMATIC PANCREATITIS can be diagnosed if the serum amylase level is found to be elevated in a patient who has sustained upper abdominal trauma.[5] If associated intra-abdominal injuries can be ruled out, the treatment for traumatic pancreatitis is the same as for non-traumatic pancreatitis. It usually responds quite well to conservative therapy. Traumatic transection of the pancreas, on the other hand, must be treated surgically. The purpose of this paper is to discuss the diagnosis and treatment of transected pancreas due to blunt abdominal trauma.

The pancreas is situated anatomically so that it can be transected by sudden severe pressure against the vertebral column. The patient may not be severely ill for the first few hours following the injury but during the ensuing 12 to 36 hours he has increasing abdominal pain and usually vomits profusely. If it can be determined that there are no other intra-abdominal injuries, if the serum amylase is elevated and if the patient is not improving on a conservative regimen, one should be suspicious of transection of the pancreas. The following case report is rather typical of this injury.

CASE 1.—A nine-year-old boy was admitted to the Los Angeles County General Hospital on April 1, 1956 at 7:30 p.m. The previous day while chasing a dog he fell on a stick he was carrying. The stick struck him in the mid-epigastrium but did not penetrate the skin. After the injury he had upper abdominal pain accompanied by transient left shoulder pain. Subsequently, he vomited on numerous occasions. Upon entering the hospital he was found to be in moderate distress but did not appear to be severely ill. The temperature, pulse, blood pressure and respirations were within normal limits. There was generalized tenderness of the abdomen, most pronounced in the left upper quadrant. The skin was intact and showed no evidence of ecchymosis. Peristalsis was normal and there was no palpable mass. The hemoglobin and the leukocyte content of the blood and the results of urinalysis were all within normal limits. No abnormalities were seen in x-ray films of the chest and abdomen. The following day the patient continued to complain of upper abdominal pain and vomited all ingested food. The left upper quadrant of the abdomen became rigid and serum amylase activity as determined at that time was 1,930 units (normal 80-150). The patient was taken to the operating room where 200 cc. of bloody fluid was found in the abdominal cavity. This fluid had an amylase activity of 30,000 units. The pancreas was observed to be completely transected at the junction of the head and body of the organ. There was a moderate amount of clotted blood in the lesser peritoneal sac, along with extensive fat necrosis. The distal segment of the pancreas was removed, leaving the spleen in place. The transected end of the pancreas was oversewn with mattress sutures of silk, care being taken to occlude the pancreatic duct completely. A drain was left in the lesser peritoneal sac.

With the exception of a transient episode of asthmatic bronchitis, the postoperative course was relatively smooth. Drainage from the wound was minimal and the wound healed *per primam*. The postoperative serum amylase and blood sugar determinations were within normal limits. The patient was discharged from the hospital on the tenth postoperative day.

When last seen some three years later he was developing quite well and had no symptoms.

DISCUSSION

Traumatic transection of the pancreas from blunt abdominal trauma is a rare injury but if not treated as outlined above, can lead to complications of long duration, if not death.[1,6,8] In reviewing the literature on this subject it is found that the most common

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methods of therapy have been: (1) Simple drainage[3,7,8] and (2) attempt at reapproximation of the pancreatic segments.[1,4] Invariably if either of these procedures was used, external pancreatic fistulas developed in patients who survived the immediate postoperative period. In 1945, Curr[2] reported a case of transection of the pancreas in which mattress sutures were placed over both ends of the severed pancreas. (Curr did not say what kind of suture material was used.) In this case also an external pancreatic fistula developed. It lasted nine months and the patient was critically ill during that time. Eventually the fistula closed spontaneously and the patient recovered.

The exposed ends of a transected pancreas are hemorrhagic and edematous, and tend to bulge out over the pancreatic duct. Fat necrosis occurs in the surrounding tissues, making accurate suture-approximation difficult. The minute size of the pancreatic duct makes anastomosis impractical. Since distal pancreatectomy can be performed with no loss of enzymatic or hormonal elements, it is the safest procedure.

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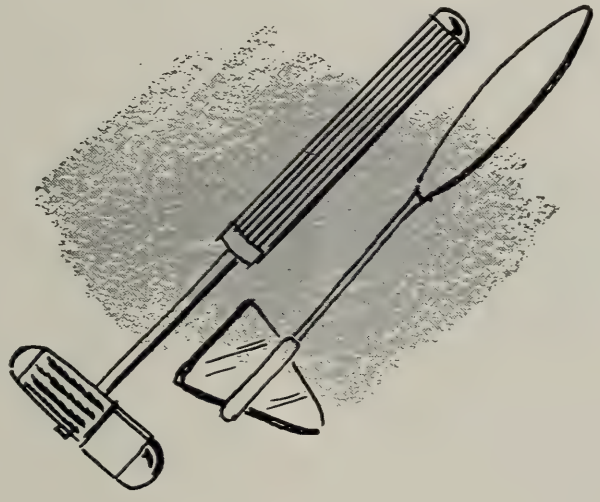
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A Theory of the Genesis of Breast Duct Papilloma

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• **While it is not the intent to argue that papilloma never develops in the conventionally accepted manner (proliferative growth from the wall of a pre-existing cavity) a new, perhaps alternative, genesis is suggested. The concept is that, beginning with the usual lobular structure of the breast, first by hyperplasia and then by coalescence of alveoli, seen earliest at the periphery of the lobule, spaces appear between the content of the lobule and the wall. By confluence of these spaces a larger cystic cavity is formed. Coalescence of alveoli through the body of the central mass, in the same way as at the periphery, develops the familiar pattern of "papilloma." Following the earlier hyperplasia, regressive changes appear and may go on to complete disintegration of the papillary mass, leaving a smooth-walled cavity.**

DUCT, OR INTRACYSTIC, papilloma of the breast is generally thought of as resulting from the growth of lining epithelium and connective tissue at one or more points of the wall of a cyst or duct out into the cavity. Whether this is considered to be actually neoplastic or as only one of the bizarre manifestations of chronic cystic mastitis, it is regarded as a purely proliferative process from the pre-existing duct or cyst wall. Figure 1 illustrates in diagram the usual concept of development of papilloma.

It is the purpose of this paper to suggest that papilloma may develop in a different way and that rather than beginning in an already existing cavity, a cyst or segment of duct may be the end result. This concept, illustrated diagrammatically in Figure 2, may be stated as follows: Starting with a normal lobule (Figure 2,*A*), the gradual changes go through lobular hyperplasia, increase in number and crowding of alveoli, as in Figure 2,*B* and *C*, then the alveoli coalesce, earliest at the periphery of the lobule (Figure 2,*D*), and in coalescing create spaces between the peripheral wall and the contents of the lobule (Figure 2,*E*). Up to this point the process has been characterized essentially by hyperplasia. Regressive changes may now appear. Further coalescence of alveoli and regressive changes through the body of the lobule lead to the pattern of so-called papilloma (Figure 2,*E* and *F*). While these epithelial changes are going on, the perilobular connective tissue becomes more dense and sharply defined. The papilloma may lastly slough off or become detached in part or in whole, leaving what appears to be a smooth-walled duct or cyst lined with epithelium (Figure 2,*G*).

Evidence in support of this concept is found in the finer epithelial cell structure in the stages of hyperplasia and then of regression. The appearances indicate heightened activity during the stages of lobular hyperplasia and as alveoli coalesce and the papillary (intralobular) mass becomes separated from the peripheral wall. This picture of activity changes to one of regression, becoming more pronounced to the point of actual necrosis in smaller or larger areas, often leading to disappearance of the papilloma and leaving a smooth cavity wall.

In more detail, the various stages are as follows:

1. The structure of the normal lobule. The lobule consists of a number of alveoli which are, of course, terminal buds of the connecting duct. Each lobule is surrounded by interlobular connective tissue which connects freely with the intralobular connective tissue lying about and between the alveoli. The alveolar epithelium consists of a single layer of generally cylindrical or cuboidal cells lying on a basement membrane (Figure 2,*A* and upper left in Figure 3).

Under high power magnification, the cytoplasm of these cells is observed to be scanty. The nuclei are round or oval and, except in a very few, nucleoli and chromatin network cannot be distinguished (Figure 3, upper right).

2. The lobule becomes more cellular and the alveoli increased in number. This hyperplastic lobule is more distinctly outlined by the interlobular connective tissue (Figure 2,*B* and Figure 3, lower left).

Under high power, for the most part the epithelial cells are enlarged and there is a noticeable change in the finer structure of each cell. The nuclei show a rather vesicular character with finely granular chromatin and a distinct, prominent nucleolus. The cytoplasm appears slightly muddy (Figure 3, lower right).

3. The lobule is very cellular and the arrangement of the epithelial cells is quite irregular as compared to that in stage 2. Since the lobular change is expan-

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Material on which this paper is based—microscopic slides from 150 breasts in all—was studied at The Royal Infirmary, Edinburgh, Scotland, at the University of Gottingen, Gottingen, Germany, and at St. Joseph's Hospital, San Francisco, California.



Figure 1.—Scheme of generally accepted concept of genesis of papilloma. *A*, Early proliferative growth from wall of duct or cyst. *B*, Further growth. *C*, Union of epithelium of growing mass with that of wall.

sive, the alveoli become compressed against the perilobular (interlobular) connective tissue, which has become more dense and sharply defined. Because of their decided increase in number, and often in size, they become compressed against each other. Especially packed are the alveoli at the periphery against the interlobular connective tissue. They have a tendency to become ovoid or elongated and to arrange themselves parallel to the border. At this stage hyperplastic lobules are seen here and there closely adjoining each other and even with a common connective tissue wall (Figure 2,*C* and Figure 4, upper left).

Under high power magnification the cells are in general large. The nuclei are vesicular and can be seen to have fine chromatin network. Nucleoli have become clearly visible (Figure 4, upper right).

4. The demarcation of the hyperplastic lobules from the surrounding connective tissue is distinct. The hyperplastic changes have reached their maximum. Alveoli have become confluent in many places, especially along the interlobular fibrous tissue. Often several alveoli in a row coalesce. As the alveoli increase in number and become pressed more closely together, the connective tissue between them becomes scanty. This intralobular connective tissue separating alveoli does not completely disappear even with so great compaction of alveoli as to suggest at first glance a continuous sheet of epithelial cells. Careful observation will show that the original intralobular connective tissue still persists. Early regressive changes after maximum hyperplasia may be recognizable. Small cavities develop in areas of degeneration (Figure 2,*D* and Figure 4, lower left).

Under high power magnification the cell size is in general as in stage 3. The nuclei are vesicular and have a fine chromatin network. Nucleoli are in most places distinctly seen (Figure 4, lower right).

5. In this stage the structure is already clearly that of so-called papilloma. This whole pattern is seen shortly after the stage of maximal hyperplasia. The fibrous tissue (interlobular connective tissue)

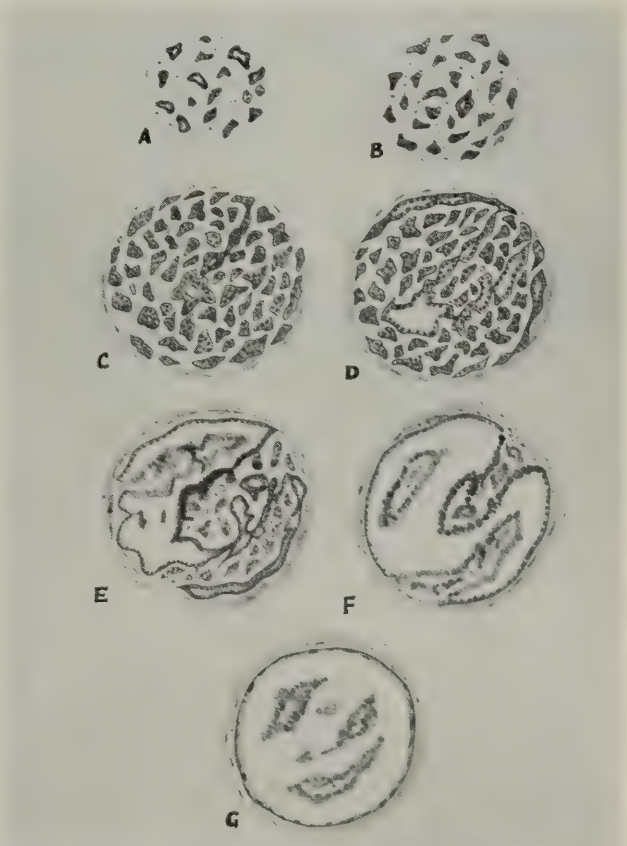


Figure 2.—Concept of development of papilloma as herein proposed. *A*, Normal lobule. *B*, Early hyperplasia. *C*, Further hyperplasia with crowding of alveoli. *D*, Coalescence of alveoli at periphery with beginning separation of central mass from wall. Early coalescence of alveoli in body of lobular mass. *E*, Further central coalescence forming pattern of papilloma. Early degenerative changes. *F*, Further regressive changes. *G*, Sloughing off of papillary masses leaving smooth-walled cavity.

which surrounds the hyperplastic lobule is better defined than in the previous stages. The separation of lobular mass from perilobular wall may now progress so far as to form a considerable cystic cavity. Many times, as in Figure 5, lower right, the shape of the surface of the retracted central mass corresponds to that of the peripheral wall across the cystic space. If the central mass were expanding by proliferation but had not yet been in contact with the wall, this correspondence of outlines would not be expected. The picture could, of course, result if the central mass had been, like a sponge, pressed against the wall without having been actually attached to it and then had pulled away by the artefact of shrinkage in fixation. But, on the other hand, it would be the expected picture if the lobular mass had been at one time continuous with the wall and had then become separated in the manner here suggested.

The cyst wall, developed by condensation of perilobular connective tissue, is covered on its inner surface by one layer, seldom more, of cuboid or cylindrical epithelium. In a few places epithelial covering may be missing. In the fibrovascular core there are

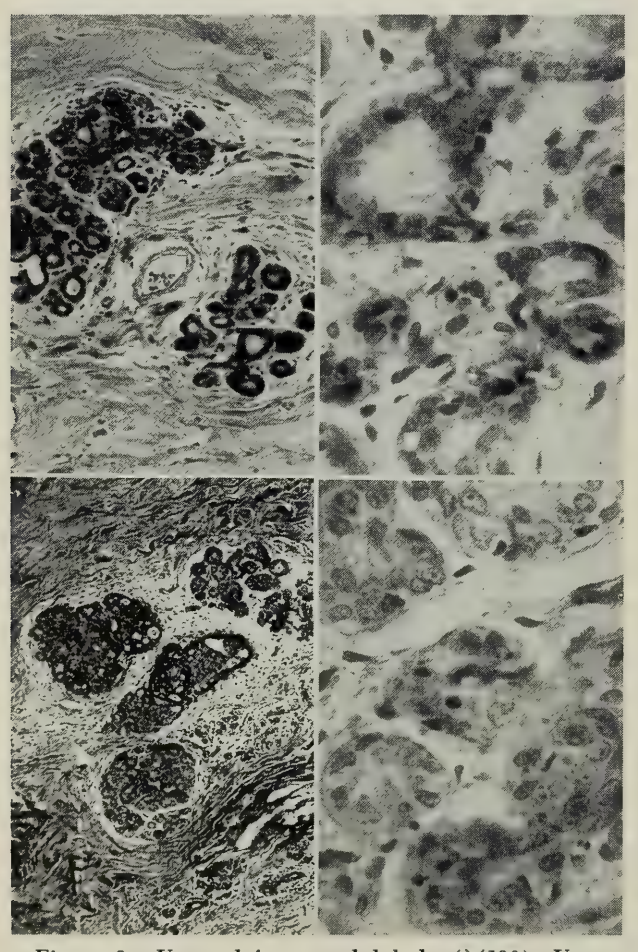


Figure 3.—*Upper left,* normal lobule (×130). *Upper right,* high power view of specimen at left (×430). *Lower left,* early lobular hyperplasia (×66). *Lower right,* high power view of specimen at left (×430).

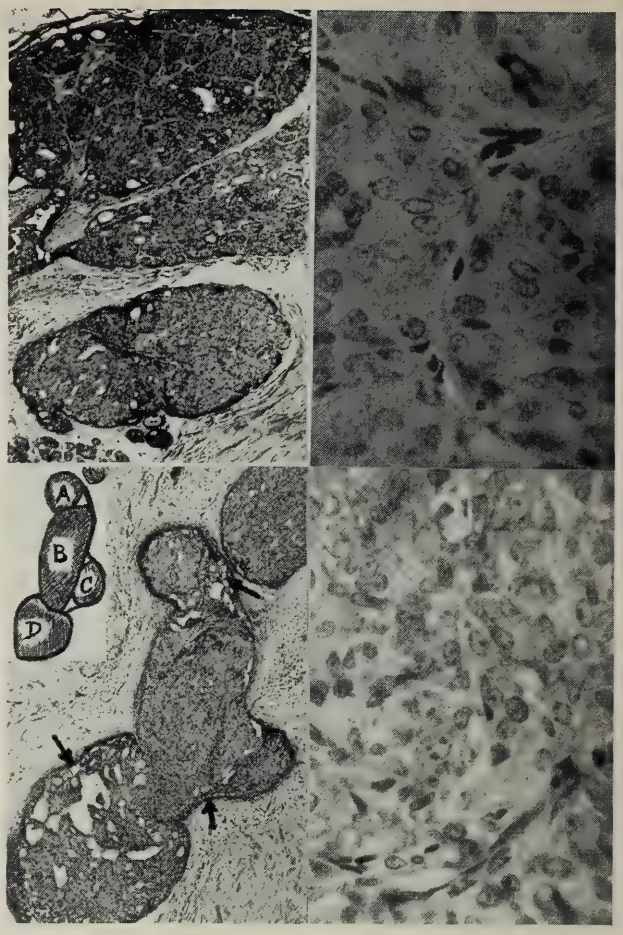


Figure 4.—*Upper left,* lobular hyperplasia. The lobule is cellular. Alveoli become compressed against each other. The perilobular connective tissue becomes more dense and sharply defined. Two hyperplastic lobules in the upper field are nearly fused together (×66). *Upper right,* high power view of specimen at left (×430). *Lower left,* hyperplastic changes have reached their maximum. Definition of the hyperplastic lobule is distinct. Alveoli join together in many places. Especially along the interlobular (perilobular) connective tissue several alveoli in a row coalesce (arrows). The main central hyperplastic mass is formed by fusion of four lobules, A, B, C, and D. Thus lobular hyperplasia with the subsequent changes described can come to be a duct papilloma of considerable extent (×35). *Lower right,* high power view of picture at left (×430).

often lacuna-like, dilated, blood-filled capillaries. One may see extravasation of blood cells and deposition of blood pigment in the stroma as well as stages of degeneration up to complete disintegration of the cells of both epithelium and stroma (Figures 2,*E*, and Figure 5, upper left and lower left and right).

Under high power magnification, although some areas have a cell structure resembling that in stage 3 or stage 4, there is less cell activity. The epithelial arrangement on the basement membrane has again become regular. Nuclei are less vesicular. The nucleoli and chromatin are still visible but less prominent than in stage 3 or stage 4 (Figure 5, upper right).

6. Regressive change is the main feature in this

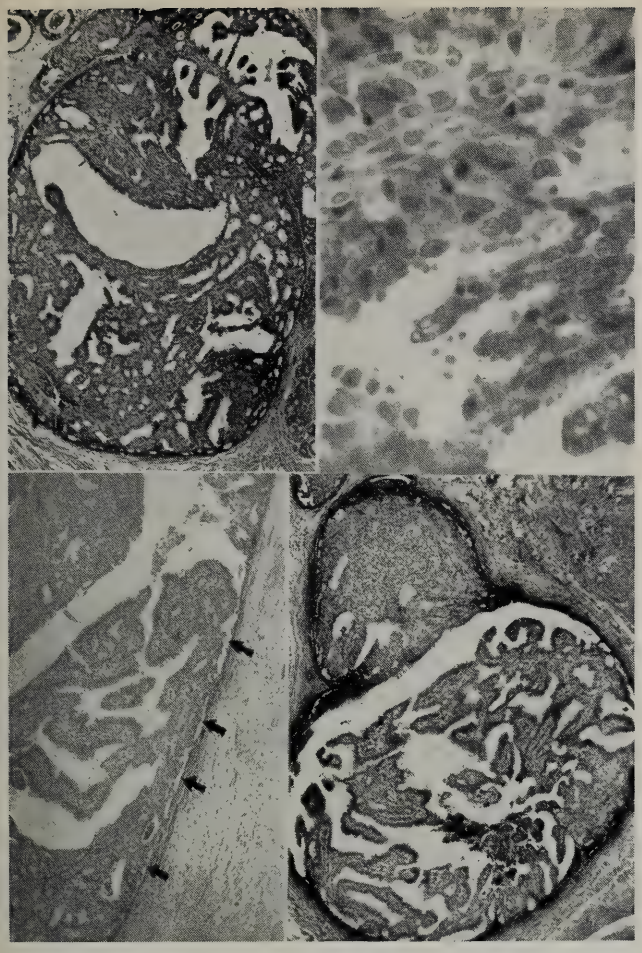


Figure 5.—*Upper left,* papilloma stage, shortly after maximal hyperplasia. The fibrous wall which surrounds the hyperplastic lobule is better defined than in the earlier stage. Several alveoli in a row under the perilobular connective tissue coalesce and facilitate separation of the lobular mass from the wall. Stages of regression up to complete disintegration of cells may be seen (especially in the upper right area of the field) (×60). *Upper right,* high power view of specimen at left (×430). *Lower left,* arrows point to early separation of the central mass from the wall (×100). *Lower right,* separation of the central mass from the wall has progressed so far as to form a considerable cystic cavity. Notice that the retracted central mass of the lobule duplicates the outline of the peripheral wall (×86).

stage. Various steps in the dissolution of the villous epithelial structure with its fibrovascular supporting framework are visible. The fibrovascular core is frequently congested with dilated blood vessels. The connective tissue of villi is sometimes hyalinized. The degeneration develops cystic cavities in which may be seen fragments of debris. The peripheral wall has become more dense (Figure 2,*F* and Figure 6, upper left).

Under high power magnification the cytoplasm of the surviving epithelium is homogeneous and the nuclei are solid, without recognizable detail of structure. In some areas cell boundaries are destroyed. Many cells have lost their nuclei (Figure 6, upper right).

7. Lastly the whole papillary structure has disintegrated, leaving only a few fragments in an otherwise empty cavity with a dense, avascular wall (Figure 2,*G* and Figure 6, lower left).

According to this view of the genesis of papilloma, it may be looked upon as a developmental stage on the way between lobule hyperplasia and final cyst formation. (This is, of course, only one of many possible ways in which cysts might be formed.)

A structure such as that in Figure 5, lower right, has usually been interpreted as showing either multiple points of origin of proliferative growth or multiple points at which a growing papilloma has united its epithelium with that of the duct or cyst wall. It is suggested that the exact opposite may be true—that connections between wall and central mass are only remains of alveolar epithelium and

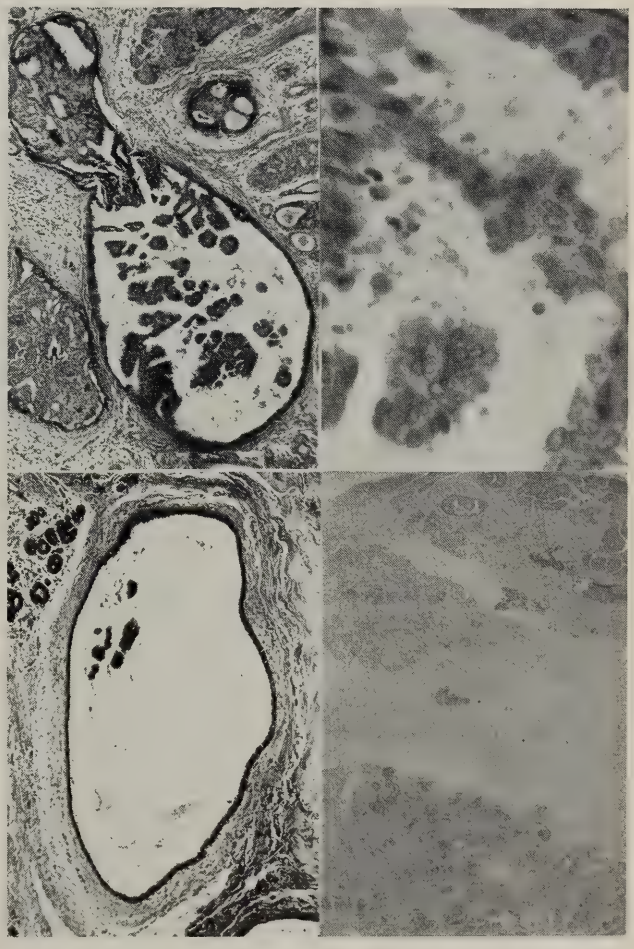


Figure 6.—*Upper left,* regressive change is the main feature. Various steps in the dissolution of the villous epithelial structure with its fibrovascular supporting framework are visible. Thus the degeneration develops a cavity of increasing size (×66). *Upper right,* high power view of specimen at left (×430). *Lower left,* the whole papillary structure has disintegrated and become detached, leaving a cystic cavity with a dense, avascular wall (×66). *Lower right,* the whole series of photomicrographs in Figures 3, 4, 5 and 6 are higher power views of various areas taken from the single slide shown here (×4).

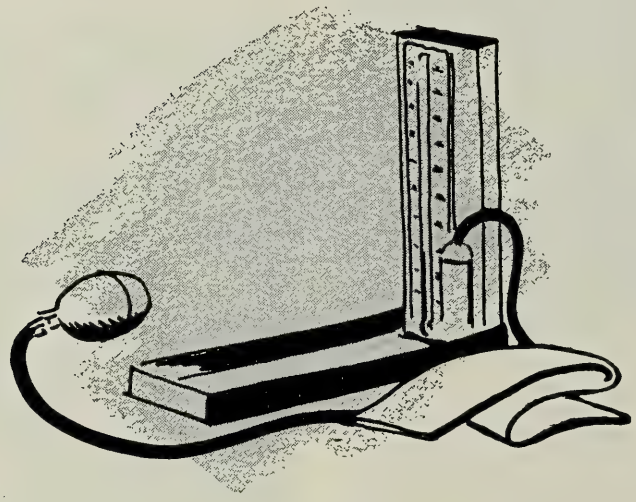
connective tissue and may break and disappear as the mass of papilloma regresses. This is nothing else than the stage 5 described above.

With sufficient search, one may usually find under the microscope other developmental stages of so-called papilloma in the same breast. Figures 3 to 6 illustrate various stages, all of them included in the one slide shown in low power in Figure 6, lower right. The frequent multiple appearance of papilloma is therefore to be expected, for lobule hyperplasia embraces a wide area of breast; and therefore its product, duct papilloma, is naturally also multiple.

Not only may multiple separate and distinct papillomata be found, but what appears to be a continuous one may reach considerable size through coalescence of several neighboring lobules. The dark, irregularly shaped structure in Figure 4, lower left, developed from four hyperplastic lobules.

Since lobules may develop (and undergo hyperplasia) at any place between the external orifice of a milk duct and its terminal branches by new budding out from the duct, occasional development of papilloma in the nipple is readily explained.

2-20, Tong-Soong-Dong, Chang-Ro-Ku, Seoul, Korea.



Human Tissue Preservation

Development of Regulations and Removal of Some Legal Barriers

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• **Human tissue must be obtained promptly postmortem if it is to be successfully preserved.**

Legal assistance toward this goal has been established by the California Legislature.

To implement this legislation the State Board of Public Health has established regulations relating to human tissue preservation. These are the first such regulations in the nation.

Tissue preservation is not yet fully developed. Much research is in progress to overcome many problems.

The future may hold interesting developments. Present laws and regulations will implement them.

THE STATE BOARD of Public Health[6] at its April 1959 meeting established regulations relating to the preservation of human tissues, as required to implement the provisions of the California Health and Safety and Probate Codes. These are the first regulations in the nation dealing exclusively with human tissues.

Blood preservation, a related activity, has been performed under regulation for many years, but this activity falls within a different category.

The preserving and transplanting of human tissues is a comparatively new development. Much investigation is still in progress. Ultimately there may be a whole system of spare parts for ailing human beings.[7,9] Before this goal is reached, however, there are still some knotty problems to unravel. At present, materials consist mostly of non-viable homografts and plastic prostheses.[1,2,10,11]

Hopeful progress is being reported.[8,9,12] The future holds the realization of these exciting prospects. For present activity and in anticipation of this interesting future, California has formulated a constructive legal background.

The state legislature in 1957 removed some of the legal obstacles from the way of persons who desire to bequeath their bodies or portions of them for use in therapeutics or in research. Section 7115 was added to the Health and Safety Code, and Section 7100 was amended.[4] Section 20 of the Probate Code was also amended.[5]

These additions and amendments provide for the immediate fulfillment of instructions in a will by which a decedent has directed that the whole or any portion of his remains be given for therapeutic use, for research or for teaching purposes.

These statutes state that regardless of the validity of the will in other respects, or of the fact that it may not be offered for probate until a later date, the persons entitled to control the remains shall faithfully and immediately carry out the instructions of the decedent.[4,5]

Such provisions make possible the procurement of valuable structures within the critical few hours following death during which they may be successfully preserved.

For future success in human tissue transplantation, adequate supplies of such tissues must be available. Development in this field may parallel the now established function of blood transfusion. Not so long ago the transfer of blood from one person to another was an exciting and spectacular surgical achievement. The donors were looked upon as heroes. Today the giving of blood is looked upon as a routine responsibility.

For other tissue transplantation to keep pace with growing scientific knowledge and therapeutic need, tissue donations will have to become routine and commonplace, and legal barriers reduced to a minimum. The recent actions of the State Legislature and the State Board of Public Health have opened the way to achieve these goals.

Physicians in their relationships with the public and with their patients have a responsibility and an opportunity to promote the popularity of developing these storehouses of human spare parts.

In the process of formulating the regulations, assistance was sought from other agencies, including the Federal Government, which presumably had some experience in this field. It was disappointing to discover that the legal situation in tissue donation is chaotic. Therefore, it is a source of satisfaction to realize that California has taken the first positive action to establish an orderly legal basis for this service.

Other communities are also taking action to improve their situations in this regard. For example there is at present a committee in Washington, D. C., whose purpose is to assist Congress in passing a bill known as "The District of Columbia Tissue Bank Act."[16,17]

Submitted June 2, 1959.

In developing the California tissue preservation regulations, the first procedure was a tour of known tissue banks. The directors of these services almost without exception welcomed the idea of legal[15] backing for their work. They assisted actively in the formulation of the regulations.

Since blood banking is well established in California, and the regulations[3] under which it functions have served successfully, the first draft of tissue preservation regulations was patterned after the blood banks. Since both procedures are similar in scope, the established blood bank regulations should have served properly as a prototype. This was not the case, however. Tissue preservation is not yet ready for regulations as precise and detailed as those in blood banking.[15] So after further consultation with persons with experience in preserving human tissues, it was decided to reword the proposed regulations into a very generalized form. This met with difficulty from another source. Attorneys stated that such generalized language was entirely unsatisfactory from a legal point of view. It was stated by them that some sort of criterion for making determinations would have to be established. The regulations as they now stand represent a compromise between detail and generalization.

It is of special interest to note that no one person professed knowledge of all types of tissue preservation. Those who work with arteries disclaim knowledge of bones or eyes, those who work with bones say they have no knowledge of arteries or eyes.

For the most part, structures transplanted at present are not living tissues.[11] Bones, for example, act as biological splints over which the tissues of the recipient grow as over a scaffolding, eventually surrounding and ultimately replacing the transplant. Arteries are used in much the same way. In fact, dacron, orlon, and other synthetics seem to work just as well as human artery transplants, and therefore, in this field human material as prepared at present may not be entirely essential.[10]

Organs as such cannot be transplanted successfully at this time, except in special instances such as from one identical twin to the other. This is due to some undescribed marker on the cells of each individual which proclaims them as belonging to himself.[9] Transplants of living tissues from place to place in the same person are successful because they are recognized in their new surroundings as belonging.

It should be emphasized that research is busily in progress toward overcoming these barriers to transplantation of living tissues from one person to another. Ferrabee and Thomas[9] have stated: "In this exciting realm of spare parts we have two newly recognized basic biologic phenomena with which to help ourselves. It is the recognition of these phenomena that has infused new life into the ancient and wistful field of organ transplantation."

Recent success with living marrow transplants following radiation of the recipient illustrates these advances.[8,12] Work at the Naval Medical Center by Hyatt and his associates[13,14] with growth of human tissue in laboratory media further strengthens hope of an eventual living tissue transplantation program.

With these inspiring developments in progress and with an optimistic future ahead, it is believed that the California laws and regulations will remove legal obstacles and lubricate the administrative machinery for the bequesting of tissues by persons before they die, thus allowing opportunity to obtain them and to use them therapeutically and scientifically at the earliest possible moment. These regulations will also be an encouragement to new tissue preservation centers, both for therapeutic use and to advance the horizons of knowledge so that when greater use of human tissue is scientifically possible, the legal and administrative tools will be available with which to promote development in this exciting field.

The text of the regulations is appended.

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REGULATIONS RELATING TO HUMAN TISSUE PRESERVATION

(Title 17, California Administrative Code, Chapter 2, Subchapter 1, Group 7, Article 1, Sections 1200-1205, inclusive.)

Statutory Authority: California Health and Safety Code, Division 7, Part 1, Chapter 3, Sections 7100 and 7115; and Section 20 of the Probate Code.

Article I.

1200. DEFINITIONS. (a) As used in this Group, "person" includes teaching institution, university, college, legally licensed hospital, non-profit blood bank, artery bank, eye bank, or other therapeutic service operated by any agency approved by the State Director of Public Health.

(b) As used in this Group, "department" means State of California Department of Public Health.

1201. APPROVAL REQUIRED FOR TISSUE PRESERVATION. No person shall collect, process, store, or distribute human tissues obtained in accordance with Sections 7100 or 7115 of the Health and Safety Code, or Section 20 of the Probate Code, unless such person shall have received approval from the department.

1202. PROVISIONS FOR APPROVAL. (a) An application for approval shall be made to the department, which shall include the following items:

(1) Complete and detailed description of the methods, equipment, and technics used in relation to each tissue which is to be processed.

(2) The name and address of the person owning the place, establishment, or institution, in which the processing is to be carried on.

(3) The name and address of the director who shall be a duly licensed physician and surgeon in the State of California.

(4) Kinds of tissues to be processed.

(5) Such additional information as the department may require in order to determine compliance with these regulations.

(b) The operation of the tissue bank shall be under the direct supervision of a physician and surgeon duly licensed in this state.

(c) The person shall be prepared to begin operations at the time application for approval is submitted.

(d) Application will be approved only when establishment and the methods used are such that the tissues processed will not be contaminated, dangerous, or harmful.

(1) Representative samples shall be provided for the department of each lot of tissues, if requested by the department, for the purpose of checking sterility, quality, or other factor.

(2) Any duly authorized representative of the department shall have free access to the establishment and the records thereof at all reasonable hours for the purpose of ascertaining compliance with these regulations.

(e) Approval may be granted only for the processing of tissues for which there is scientific evidence of therapeutic value and for which methods of preservation have been developed.

(f) Renewal of Approval. (1) The department shall issue renewal notices annually prior to the end of each calendar year.

(2) Each person on applying for renewal shall review his activities in the field for the preceding year if requested to do so by the department.

(g) There is no fee required in connection with this approval, or with renewal of approval.

1203. EXEMPTIONS FROM APPROVAL. This Group does not apply to autogenous tissue grafting, or to homografts where tissues are obtained from living donors, or to other biologic products as defined in Section 1601 of the Health and Safety Code.

1204. RECORDS. (a) The director or supervisor of approved tissue processing programs shall keep records of all tissues processed.

(b) Records may be designated by number (instead of by name of donor) to conform with individual specimens or lots of tissue.

(c) Records shall contain the following data:

(1) Name and address of institution from which material was obtained, also name of physician responsible for procurement.

(2) Date and hour of death of donor.

(3) Cause of death, and age of donor, and when available, pathologic results including autopsy report.

(4) Date and hour of obtaining tissue. If more than 4 hours postmortem, state whether refrigeration was used and, if so, give length of time and temperature.

(5) Date and method of processing tissue, if applicable.

(6) Date final storage begins.

(7) Date and place of use.

(8) Results of tests for contamination and other examinations.

(9) Pertinent laboratory data, such as serologic tests for syphilis, from donor. Prospective donors with histories of hepatitis shall not be accepted.

(10) Information relating to consent or authorization.

(d) Unless otherwise required by other provisions of law, all records and information shall be retained for not less than two (2) years.

1205. LABELS. (a) A method which will positively identify each specimen during the period from procurement to the beginning of final storage shall be placed in effect by each person.

(b) The final label shall show:

(1) The name of the product, and method used in processing.

(2) A number which will identify the processing information related to the specimen.

(3) A date prior to which use must be made of the product, or prior to which use of the product is recommended, whichever is applicable.

(4) Name and address of the processor.

(5) If temperature is a factor in preservation, the temperature range within which deterioration is avoided shall be specified.

(6) Other data descriptive of the product may also be included in the label.

(7) Directions for reconstitution of the product, and preparation for its use may be included in the label or in an accompanying circular.

(8) Altered or supplementary labels shall not be used.

CASE REPORTS

Mesenteric Duodenal Ileus

WARNER M. SOELLING, M.D., Modesto

INTESTINAL OBSTRUCTION due to compression of the horizontal duodenum by the superior mesenteric artery is a well established, but little known, entity. First described in 1861,[5] the condition has been infrequently diagnosed and has come to be regarded as rare. It is briefly mentioned in most textbooks of medicine under the terms *arteriomesenteric ileus, mesenteric artery syndrome, mesenteric root syndrome* and *mesenteric duodenal ileus.* During the past decade there has been a renewal of interest in the syndrome with the publication of a number of case reports, and it has been suggested that the condition may be more common than has been assumed.

The following case is presented to illustrate the mild and chronic form in which mesenteric duodenal ileus may manifest, and the association of weight changes with the development of the syndrome and its remission.

REPORT OF A CASE

A 13-year-old girl was seen in the office because of pain in the right epigastrium of a month's duration. The pain was described as varying between a feeling of fullness and moderate discomfort. It did not radiate and was unrelated to meals, to exercise or to changes in position. There was no nausea or vomiting, and no abnormality of bowel habits. The family reported that the patient had become noticeably plump during the preceding months. They did not know the exact weight gain.

The patient had been troubled by similar symptoms since age 4. Her parents recalled her becoming easily fatigued and being unable to keep up with her playmates and had attributed her pains to this excessive fatigue. They had never noted any constipation or any association of the discomfort with meals. At ages 5 and 7 the pains became sufficiently aggravated to cause admittance of the patient to a hospital. During the first hospital stay tonsillectomy was done in the expectation that it might provide a solution. The second admittance to hospital was urged by the family physician, who suspected appendicitis. The consulting surgeon[6] found some spasm of the rectus muscle, more prominent on the right, and mild tenderness upon palpation. His impressions were possible appendiceal irritation and left bronchopneumonia, and he decided against surgical intervention. The patient improved with bedrest and was discharged after three weeks of observation.

Upon physical examination the patient was observed to be well developed, somewhat obese, and apparently in excellent health. The abdomen was soft and non-tender, and no organs or masses could be palpated. The vital signs and other physical findings were within normal limits, as were the results of routine urine and blood examinations. The impression was that the patient had functional intestinal spasm, and Thorazine Spansules® (chlorpromazine), 75 mg., to be taken on arising and in the early afternoon, were prescribed.

When seen two weeks later, the patient said that she felt worse and her description of the discomfort was unvaried. A mass palpated in the right epigastrium was thought to be a distended intestinal loop. The patient was put in hospital, where she was given a liquid diet and was kept at bedrest. There was prompt subjective improvement and three days later the abdominal mass could no longer be felt. A plain x-ray film of the abdomen at this time showed no distention. Studies of the upper gastrointestinal tract showed a decided delay in the passage of barium in the midline, where the superior mesenteric artery crosses the duodenum; this was totally relieved when the patient was placed in the prone position. It was concluded that the patient's symptoms were referable to a mesenteric duodenal ileus. She was discharged with instructions to resume normal activities, but to eat smaller meals and to assume the knee chest position if the discomfort should return.

There was no recurrence of symptoms in the ensuing 12 months of observation. The parents reported that immediately following the period in the hospital the patient's weight decreased 10 pounds and that she appeared slimmer. In x-ray studies carried out six months later no abnormality of the upper gastrointestinal tract was observed.

DISCUSSION

The symptoms commonly associated with mesenteric duodenal ileus are those of high intestinal obstruction with continued upper abdominal distress, nausea and vomiting and loss of weight[3];

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Cunha and Day[2] said vomiting was present in every case. That the condition can occur in milder form, manifesting in nothing other than epigastric discomfort, is evidenced by the present case.

In contradistinction to the short history in most of the reported cases, the symptoms in the case here reported recurred over a period of ten years; on three widely separated occasions, at ages 5, 7 and 13, they became sufficiently aggravated to require hospitalization. Christian[1] suggested the chronic remittent nature of this condition when he described attacks in childhood with freedom from the age of 12 and 15 years and recurrence in adult life.

A striking correlation between weight changes and alternation of symptoms was manifest in this patient. The exacerbation of complaints was preceded by a pronounced gain in weight, and complete remission followed weight reduction; the existence of the duodenal obstruction and its subsequent disappearance were objectively established by x-ray studies. Cunha and Day[2] described weight changes as common to all patients with the syndrome. They attributed the impingement of the artery upon the duodenum to changes in structural relationships attendant upon alterations in fat deposits in the tissues of the duodenum, mesenteries and retroperitoneal spaces. In the absence of other measures, the improvement in this patient appears to have come about through a reversal of the weight gain which preceded the exacerbation of symptoms.

It would appear that noting a change in body weight in association with this syndrome would be of clinical value. A history of weight gain or loss preceding the onset of symptoms can alert the clinician to the possible presence of this condition. Such a history may further serve to indicate the direction of medical measures for the purpose of reestablishing the patient's weight at the level obtaining before symptoms occurred. The improvement in the patient in the present case suggests the possible effectiveness of this approach. Conceivably, such management may reduce the number of patients requiring surgical intervention.

With regard to the incidence of mesenteric duodenal ileus, the report of Keegan and Tyson[4] of four cases having been diagnosed at one air force hospital within a year's time suggests that the syndrome may not be as rare as has been assumed. It is to be wondered whether less severe forms of this condition might not be the cause of abdominal discomfort in an appreciable number of patients with mild remittent complaints which are never satisfactorily explained. The tendency of the condition to manifest in mild and chronic form, as illustrated in this case, renders recognition problematic since the x-ray studies necessary to the diagnosis are less likely to be done when symptoms are minimal. If clinicians remain aware of the syndrome and consider it in the differential diagnosis of patients with abdominal complaints, it is conceivable that this condition will be diagnosed with greater frequency and become recognized as a more important cause of abdominal discomfort.

SUMMARY

A case of mesenteric duodenal ileus was established by x-ray studies in a 13-year-old girl with a ten-year history of remittent abdominal discomfort. Exacerbation of complaints was preceded by a gain in body weight and remission followed a loss in weight.

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Congenital Esophageal Stenosis

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THE CONGENITAL tracheoesophageal fistula complex is an unusual anomaly of newborn infants. Esophageal stenosis without fistula is quite rare; very few reports of it appear in the literature. Humphreys and co-workers[3] reviewing 136 cases of esophageal anomalies, noted only one case of esophageal stenosis without fistula. Without fistula, stenosis generally does not require emergency therapy, for unless there is esophageal communication with the tracheobronchial tree, aspiration pneumonia is unlikely. When the obstruction is incomplete and liquids can pass, frequently the first manifestation occurs when solid foods are added to the diet.

Gross[1] reviewed 38 cases of congenital esophageal stenosis from the records of the Boston Children's Hospital. In half the cases the stricture was in the middle third of the esophagus, in a fourth of cases it was in the upper third and in a fourth in the lower third. Gross indicated that repeated dilatation gave complete relief in most cases and stated that one child had 91 dilatations over a 14-year period. However, in recent years he has treated five patients (aged three months, ten months, sixteen months, ten years and eleven years) by resection and end-to-end anastomosis. His present plan of therapy for these patients would seem to be summarized by his statement "the results [of resection] have been so gratifying that we believe that any congenital esophageal stenosis which does not seem to be yielding after a

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Figure 1.—Preoperative film August 6, 1958 showing segment of esophagus still stenotic despite bouginage which had been carried out 12 times.

half dozen attempts at dilatation should be strongly considered for surgical resection or revision of the strictured area."

Hollinger and co-workers[2] indicated that in most cases bouginage was helpful but stated that surgical correction was necessary in some cases. One of the patients included in their report, who was treated by a procedure of the Ramstedt type, subsequently required occasional endoscopic dilatation. Vargas and co-workers[5] reported the use of myotomy in the case of a seven-weeks-old girl with a stenotic area at the cardioesophageal junction. Postoperatively a barium swallow showed continued narrowing with partial delay in passage of the ingested material. Dilatation every week for eight weeks then was carried out, with gradual increase in the size of the bougie up to a No. 28 (French). An esophagram eight months postoperatively showed no obstruction and clinically the child was asymptomatic.

Sweet and Terracol[4] stated that congenital esophageal stenosis without fistula is due either to a mucosal membrane or web, or to narrowing of the lumen in a portion of the esophagus caused by a thickening of the muscular wall. They said that bouginage is usually effective in cases of obstruction by mucosal membrane, although occasionally more definitive operation is required—either excision of the membranous diaphragm or cruciate incisions of the membrane. Surgical excision of a non-membranous obstruction may require the sacrifice of a segment of esophagus measuring up to 2 cm. in length. Humphreys and co-workers[3] stated that a defect 2 to 3 cm. in length may be gapped successfully and an end-to-end esophageal anastomosis performed.

The following case report indicates our method of management of esophageal stenosis without fistula.

REPORT OF A CASE

The patient was a 12-months-old girl, the product of a normal pregnancy and delivery. When she was first given solid food at one month of age, difficulty in swallowing was noted. Solid feedings were regurgitated and only liquids could be retained. At that time x-ray studies showed a stenosis at the junction of the middle and upper thirds of the esophagus. Gastrostomy was done to facilitate feeding and to permit retrograde dilatation with a Tucker bougie.

After two months of this treatment the gastrostomy was closed and peroral esophagoscopy with bouginage of the stricture was carried out for eight months at intervals of one to three weeks. For varying periods after bouginage the child could swallow pureed foods; and each time she began again to regurgitate feedings, bouginage was repeated.

The infant was referred to us for care when she reached the age of 12 months. Esophagoscopy and dilatation was carried out four times at approximately two-week intervals. X-ray studies (Figure 1) were done immediately following bouginage with instruments up to a size 20 (French). By filling the esophagus above and below the stenotic area with barium, the length of the stricture was delineated. Pressure over the filled stomach caused reflux of barium from the stomach into the lower esophagus distal to the stricture. The stenotic segment of esophagus as seen in the x-ray films was about 1.8 cm. long.

On esophagoscopic examination the lumen was observed to be narrowed to about 1 mm. in diameter at the proximal end of the strictured area. The mucosa appeared normal. Bougies of size 12 to 20 (French) were passed consecutively through the stenotic segment with moderate resistance.

Since esophagoscopy and dilatation had been performed every one to three weeks for approximately twelve months without adequate improvement, we felt that more definitive surgical therapy should be carried out to avoid the hazards of repeated anesthesia and bouginage and to provide a more satisfactory means of feeding.

At operation—a preliminary cannulation of the inferior vena cava through the long saphenous vein at the femoral junction was carried out. A transpleural approach through the right fourth intercostal space was used. The esophagus was delineated and although the external configuration was normal throughout, a segment 1.5 to 2 cm. long in which the wall was decidedly thickened was felt. This area was somewhat more adherent to the surrounding tissues but no evidence of a tract or band to the tracheobronchial tree was present. The involved segment of the esophagus was just cephalad to the tracheal carina and corresponded to the strictured segment demonstrated by the barium swallows.

The esophagus was mobilized from the thoracic inlet to about 1.5 cm. proximal to the esophageal

hiatus. No vascular insufficiency was manifest by change of color of the esophagus.

As a preliminary to excision of the segment of thickened and stenotic esophagus, a vertical incision was made through the muscularis and an attempt was made to separate the muscle bundles in a manner similar to that followed in a Ramstedt procedure. This could not be done satisfactorily. The normal esophagus above and below the area of stricture was grasped with Potts ductus clamps and the strictured area was then excised.

An end-to-end anastomosis was carried out with two layers of interrupted 5-0 atraumatic silk sutures used to secure the union. No tension was present on the suture line after the anastomosis had been made. The Potts ductus clamps greatly facilitated the handling of the esophageal ends during the anastomosis and caused no injury. Before the anastomotic line was closed anteriorly, a No. 8 polythene tube was threaded up to the retropharynx and down to the stomach. The cephalad end was brought out through the right nostril.

After completion of the operation, nasogastric suction was maintained continuously for 72 hours. The intercostal catheter that had been inserted before the chest was closed was attached to underwater drainage bottles. The tube was removed the day after operation. During the period of nasogastric suction, hydration was maintained by routine intravenous feedings. On the second postoperative day the patient passed flatus and stools. On the following day sugared water was given in 1 to 2 ounce feedings every hour through the polythene nasogastric tube. When this regimen was seen to be well tolerated by the gastrointestinal tract, skimmed milk was substituted for the sugared water. On the fourth postoperative day the nasogastric tube was removed and feedings by mouth were started.

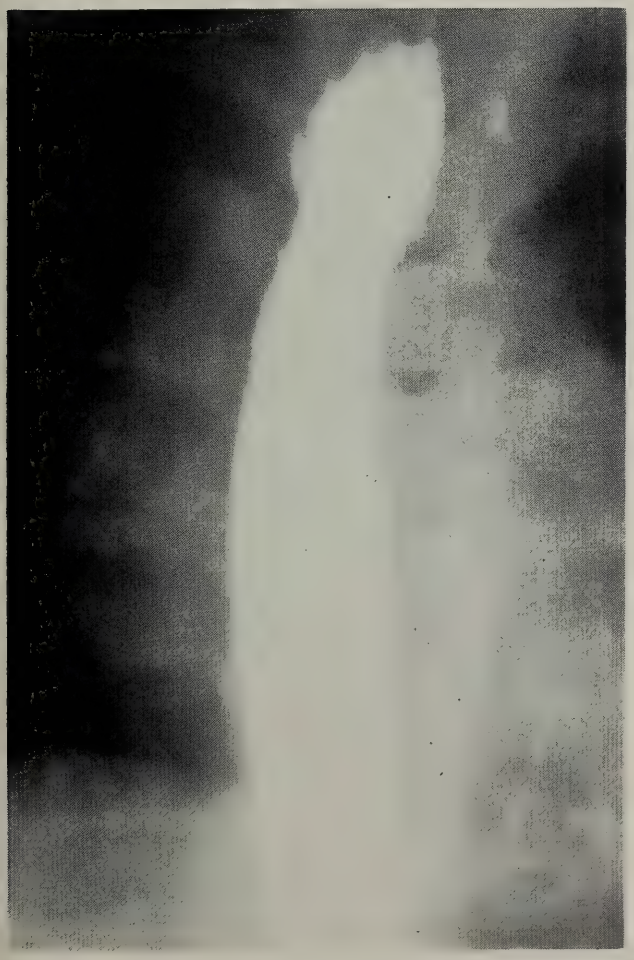


Figure 2.—The esophageal diameter on August 24, 1959 is shown to be excellent one year following operation, and ten months since the last esophagoscopy and dilation.

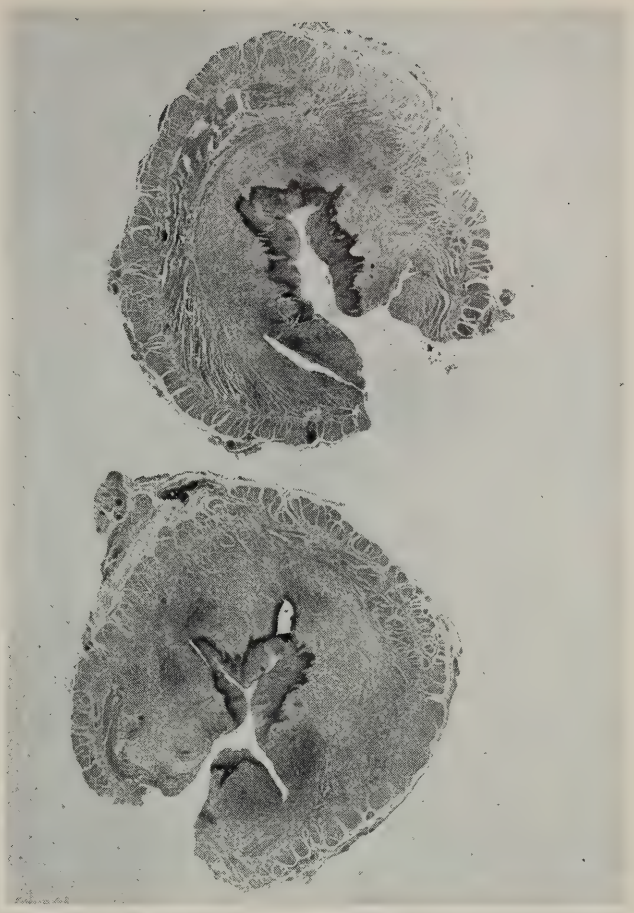


Figure 3.—This low magnification photograph demonstrates the cross-section of the excised stenotic segment of esophagus. Note the narrowed lumen and decided thinning of submucosal fibrotic layer.

X-ray examination with barium swallow on the ninth postoperative day showed an excellent lumen the length of the esophagus. The infant was discharged on the eleventh postoperative day.

The specimen was a mucosal lined narrow tube-like structure 1.5 cm. long and 1.2 cm. in diameter.

Microscopically (Figure 2) the submucosa and muscularis were observed to be decidedly thickened. Scar tissue partially supplanted the submucosa and extended into the muscularis. There was an elongated narrow ulcer of the mucosa extending to the muscularis externa, and it was surrounded by a heavy infiltrate of mononuclear cells and polymorphonuclear neutrophils and eosinophils.

Following discharge from the hospital the infant

was given a soft diet including pureed foods. When there seemed to be some difficulty in swallowing that developed shortly after "junior" chopped foods were introduced to the diet about two months after the patient returned home, esophagoscopy was carried out again. The lumen of the esophagus at the anastomotic line was 4 to 5 mm. in diameter when first visualized. The esophagus was dilated with no difficulty from a size 20 (French) through size 32 bougie. After that, a 40x7 mm. Jackson bronchoscope was readily passed through the anastomotic line.

At the time of latest observation, a year after operation, the child's nutritional status was excellent and she weighed 25 pounds. She was able to swallow foods of a size normal for her age. X-ray examination with a barium swallow (Figure 3) showed an almost completely normal lumen at the site of anastomosis.

SUMMARY

In treating a patient who had congenital esophageal stenosis without fistula, esophagoscopy and dilatation were carried out 15 times at one-week to three-week intervals during the first 13 months of life. Owing to recurrent difficulty with solid foods, esophageal resection with end-to-end anastomosis was then carried out.

Esophagoscopy was performed once again two months postoperatively. The patient was clinically well thereafter and the esophageal lumen was radiographically normal.

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Pulseless Disease (Takayashu's Syndrome)

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"Pulseless disease" was first described in 1908 by the Japanese ophthalmologist, Takayashu.[10] He noted, in young Japanese women, retinal vessel changes and cataract formation associated with decreased or absent pulses in the branches of the aortic arch. Between 1908 and 1952, a total of 58 cases were described by Japanese authors. From 1952 to 1956, a total of 49 cases in the Occident (46 in females and three in males) were reported.[2,3,4,6,9,11]

Synonyms include *aortic arch syndrome, young female arteritis, obliterative brachiocephalic arteritis, chronic subclavian-carotid obstruction syndrome*[5] and *hypersensitivity arteritis.*[7] The disease is now thought to be caused by a hypersensitivity reaction and has been placed in the visceral angiitis group which includes the collagen vascular diseases.

The clinical manifestations of pulseless disease are those of arterial deficiency in the upper half of the body with involvement of the branches of the aortic arch and reduced or absent pulses in the brachiocephalic arteries and their divisions. The disease is noted most frequently in women 15 to 45 years of age. Often there is a past history suggestive of rheumatic fever, rheumatoid arthritis or lupus erythematosis. Carotid sinus syncope, perforation of the nasal septum and cerebral atrophy with epileptiform crises have been described; also visual disorders with retinal vessel changes, iris atrophy, cataract formation and corneal opacities. Facial and arm muscle atrophy may occur, as well as intermittent claudication of the masticatory and arm muscles. Hypertension of arteries in the legs is frequently present. Extension of the pathologic process beyond the aortic arch has been demonstrated in the intercostal arteries, in the visceral arteries and in the lower extremities. Tachycardia, cardiac hypertrophy and dilatation complete the clinical picture.

REPORT OF A CASE

A moderately obese, 25-year-old Mexican housewife was examined June 10, 1957, on complaint of increasing fatigue over a period of three months, headaches, dizziness, exertional shortness of breath and pronounced weakness and numbness of the entire left arm. She had had no difficulty with three pregnancies seven, five, and two years previously. From childhood until age 17, she was a circus trapeze performer in Mexico. From her recitation of her diet at that time of extreme physical activity it was calculated that she consumed at least 9,000 calories daily, consisting of 50 per cent fat, 40 per cent carbohydrate and 10 per cent protein. She had between-meal snacks of chocolate and candy bars with nuts, ice cream, soft drinks, potato chips, peanuts, enchiladas, tacos, tortillas and coffee with cream. Eighteen months before the onset of the present illness, the patient reduced her total daily caloric intake to 4,000, the proportions of fat, carbohydrate and protein remaining the same.

The patient was 62 inches tall and the body weight was 156 pounds. A grade II hypertensive retinopathic state was noted in the right eye; the left fundus was normal. There were no characteristic arteriovenous aneurysms in the retinal vessels as originally described by Takayashu. The pulse rate was 90. The blood pressure was 180/70 mm. of mercury in the right arm, 104/84 in the left arm and 112/88 in the right leg. The left carotid pulse was decidedly diminished and the left radial pulse barely palpable. The right carotid and radial pulses were full and strong. The femoral, dorsalis pedis and posterior tibial pulses were reduced. While the neck was being gently palpated, the carotid sinus was apparently

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stimulated, causing the patient to collapse momentarily. A vigorous thrust of the aortic arch accompanied by a systolic thrill was easily felt in the retromanubrial notch. A high-pitched, grade II systolic murmur was heard over the entire precordium and was transmitted up into the neck, posteriorly along the spinal column and down the abdominal aorta.

Results of blood serology (VDRL) were negative. No abnormalities were noted on routine urinalysis, in results of blood cell counts, in hematocrit determinations, in contents of cholesterol, non-protein nitrogen and protein-bound iodine, of the blood or in urinary 17-ketosteroids and 17-OH-corticosteroids (11-oxysteroids). There was a decided elevation in the serum lipoproteins; the standard Sf* 0-12 was 643 mg. per 100 cc. (normal 283 mg.) and Std. Sf 12-400 was 200 mg. per 100 cc. (normal 107 mg.). The serum albumin, as determined by paper electrophoresis was 3.3 gm. per 100 cc. The beta component was just above the normal, being 1.2 gm., and the gamma globulin was elevated to 2.2 gm. per 100 cc. No abnormality was observed in an x-ray film of the chest or in fluoroscopic examination of the heart. An electrocardiogram was within normal limits.

Angiocardiography was carried out and all films in the series showed an abrupt ending of dye distribution at the level of 6th thoracic vertebra, which approximated the lower limits of visible calcification in the wall of the aorta. One interspace above this, there was a segment of decreased dye density. The exact site of stenosis or coarctation could not be identified.

A month later, retrograde aortography was undertaken but visualization of the thoracic aorta after dye injection was unsatisfactory. Exploratory thoracotomy then was carried out. The thoracic aorta from the level of the innominate takeoff to below the diaphragm (as far as could be felt) was decidedly narrowed, thickened, non-pulsatile and sclerotic, with large stony-hard plaques making it completely inadequate for either replacement or by-pass surgical repair. There was involvement and narrowing of the left common carotid and left subclavian arteries. The inflammatory reaction extended into the paravascular tissues, making dissection extremely difficult. The intercostal vessels were so nearly obliterated as to be hardly identifiable. At no point was there definite coarctation of the aorta. There was some pulsation of the aorta in the ascending portion and at the area of the innominate takeoff. All pusations of the aorta disappeared beyond this point. Attempt at an aortogram on the table was unsuccessful. Puncturing the aorta proved it to be a rigid tube in no way resembling a normal elastic vessel. Biopsy was not obtained. No satisfactory correction of the vascular disease could be carried out. The patient was returned to the ward in good condition.

Postoperatively, the patient's treatment consisted solely of a low-fat, 1,200-calorie diet with multivitamin supplement and sitosterol. Physical findings remained unchanged during the subsequent months except for loss of 20 pounds in body weight. Dizziness, headache, weakness of the left arm and undue fatigue abated. The patient did all her housework and frequenty walked to town, a round-trip distance of two miles. Serum lipoprotein studies showed standard Sf 0-12 of 325 mg. per 100 cc. (slightly elevated) and the standard Sf 12-400 of 104 mg. per 100 cc. (normal).

*Sf = Svedberg flotation units—a designation of density of lipoproteins.

DISCUSSION

The apparent success of treatment along antiatherogenic lines plus the history of huge consumption of fat raises some question as to the origin of arterial disease in this case. I suspect that the patient has atherosclerosis of the aorta superimposed upon hypersensitivity arteritis. The extension of the inflammatory reaction beyond the large arteries into the paravascular tissues is characteristic of a hypersensitivity reaction. The hyperglobulinemia is further evidence of a possible relationship between "pulseless disease" and disorders of the visceral angiitis group.

The differential considerations in diagnosis of "pulseless disease" include syphilitic and non-syphilitic aortitis, congenital anomalies such as coarctation of the aorta and aortic arch disease due to chronic dissection, trauma or atherosclerosis.[1,8] Clinically it is difficut, if not impossible, to differentiate aortic arch disease caused by atherosclerosis from that caused by hypersensitivity arteritis except for the age and sex of the patient. Atherosclerosis appears in the older age group of both sexes, whereas "pulseless disease" occurs predominately in young women. Biopsy specimens in "pulseless disease" characteristically show extensive luminal narrowing with medial and periadventitial fibrosis resembling the findings in the temporal arteritis of Horton.

Treatment is primarily conservative. Usually thromboendarterectomy or arterial grafting is technically impossible. On theoretical grounds, it is doubtful that surgical treatment would offer lasting relief, because of the allergic nature of the disease. Adequate rest, proper diet and administration of multivitamins, antihypersensitivity substances and anticoagulants constitute the mainstays of therapy. Aspirin is given in a dosage of .06 gm. per pound of body weight per day, ascorbic acid one to two grams per day, and prednisone (or a similar corticoid) 2.5 to 5 mg. three times daily. Corticoids are especially indicated if the eosinophil content of the circulating blood is high. If helpful, they should be continued indefinitely, since discontinuance may cause exaggerated tissue reactions of the Arthus and Sanarelli-Schwartzman type often seen in other forms of angiitis. These reactions are suppressed by corticotropin (ACTH), cortisone and the previous injection of nitrogen mustard. Heparin or dicoumarin also prevent the Schwartzman reaction and have been used in the treatment of this disease. Potassium in large amounts has been suggested.

SUMMARY

A case of "pulseless disease" in a 25-year-old Mexican woman is presented. Her diet was unusually high in calories and fat. Treatment was mainly supportive with strict attention to a weight-reduction and low-fat diet. Clinical features of pulseless disease and methods of treatment are discussed.

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Trismus Due to Perphenazine (Trilafon®) And Proclorperazine (Compazine®)

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TRISMUS is a dramatic occurrence which hitherto immediately raised the fear of tetanus as the most likely cause, assuming local abnormalities could be excluded. The introduction and widespread use of phenothiazines has added another possible cause that must be considered whenever trismus is encountered. While it has been described,[4,7,9] trismus has not been stressed as a "side effect" of the phenothiazines. The obvious importance of differentiating trismus medicamentosa from trismus due to tetanus prompted this report of three cases of the former.

REPORTS OF CASES

CASE 1. A 60-year-old white woman was first seen in her home at about 8 p.m. on December 11, 1958, because of "jaw spasm" of about ten hours' duration. She had first noted difficulty in enunciation at about 10 a.m. that day. Soon thereafter, and intermittently throughout the day, she had had episodes of spasm of her jaw muscles with biting of her tongue. At such times her tongue would protrude from her mouth and she had the feeling she was unable to bring it back into her mouth. Associated with the episodes of "jaw spasm" she had a feeling of "numbness" deep inside her face bilaterally, "but I do not mean the skin by this description." Subsequently it was determined that the patient had been given chloral hydrate and perphenazine (Trilafon®) by another physician in treatment for alcohol withdrawal symptoms. She had taken 16 4.0 mg. tablets of Trilafon® (perphenazine) beginning December 9. The instructions on the bottle were for two tablets every four to six hours. The patient said she believed she took eight on December 9, six on December 10 and only two early on the date of the onset of the trismus. She had been seen earlier that evening by the physician who had prescribed the drug, and he had administered calcium intravenously for the trismus, without effect. There was no history or evidence of a recent puncture wound.

Four days previously the patient had ended a one-month-long drinking spree. She had over-indulged to some extent in alcohol periodically for years. Some elements of the hyperventilation syndrome were present by history, particularly excessive sighing, globus hystericus and tachypnea.

The patient had never had tetanus prophylaxis.

The blood pressure was 150/80 mm. of mercury, the temperature 100.0°F. rectally, and the pulse rate 90. The pulse was regular. Respirations were slightly increased. The patient spoke with a slightly nasal tone and her speech was slurred. She was alert and oriented in all spheres. At one time she had a flapping-like tremor of both upper extremities, not of a convulsive nature. Only a few lower central teeth were present, and the tongue, which was cyanotic was swollen and lacerated on the right side. Several ecchymotic areas were present on both sides of the mouth, apparently the result of pressure by the upper and lower gums. There were no oral masses and no evidence of infection. Neither tenderness over the maxillary sinus areas nor postnasal drip was observed. The neck was supple. Plantar reflexes were downward and the ankle jerks, knee jerks, biceps and triceps were all normally active and equal throughout when tested between seizures No abnormalities of sensation in the hands and feet or of motor strength in the extremities were noted in a brief examination. Abdominal palpation elicted no abnormality. In particular there was no abdominal muscle spasm.

An attack of trismus occurred when the patient was first seen, but it rapidly disappeared spontaneously. Soon thereafter the patient had a severe episode of bilateral masseter muscle spasm. During this episode her tongue protruded and while biting down fiercely on it, she moaned with pain. Two to three minutes of efforts to pry her jaws apart were unavailing and she was then given sodium amytal intravenously. After the administration of approximately 0.2 gm. the muscular spasm disappeared and the patient was able to retract her tongue. There were no further attacks of trismus.

Submitted August 14, 1959.

The patient was put in hospital that night. An otolaryngologist who examined her could find no local cause of trismus.

Hemoglobin content and packed cell volume of the blood were within normal limits. Leukocytes numbered 15,100 per cu. mm.—75 per cent segmented, 22 per cent lymphocytes, 1 per cent monocytes and 2 per cent eosinophils. The serum calcium was 11.5 mg. per 100 cc. and the serum phosphorus was 2.9 mg. per 100 cc. Blood urea nitrogen content and results of liver function test and spinal fluid test were all within normal limits. Serum magnesium content was 1.84 mg. per 100 cc. The urine showed a very slight trace of albumin and it contained 20 to 30 pus cells per high power field.

On December 16 the patient spontaneously hyperventilated with respirations at the rate of one a second for approximately 70 seconds. At this point she was dizzy, tired and unable to continue, but there was no evidence of tongue protrusion or trismus.

Case 2. The patient, a 37-year-old white woman had onset of abdominal cramps, diarrhea and nausea without vomiting on Friday, January 30, 1959. These symptoms persisted and Combid® was prescribed the next day. Each Combid® spansule contains 5.0 mg. of isopropamide (Darbid®) and 10.0 mg. of proclorperazine (Compazine®). The patient had only one Combid® capsule on Saturday and one Combid® capsule in the morning and one in the evening of Sunday, February 1. She was comfortable on awakening the next day, but at 10 a.m. she noted the onset of spasm of her jaws with facial muscle spasm, continual yawning without control, and "slurring of speech"—a thick-tongued speech which caused listeners to snicker. There was also a "pulling of the tongue back into the throat." The patient cried frequently for two hours, after which spontaneously symptoms ceased for approximately three hours.

At 3:30 p.m. symptoms resumed with "tongue swallowing," dryness of the mouth and spasm of the jaw with "dislocation to the left side." Again these subsided after an hour, then recurred at 5:30 p.m. When the patient was observed at 5:45 p.m. spasm of the masseters, facial muscles and periorbital regions was noted. She was in a state of great anxiety and was holding her tongue with her fingers to "keep it from being pulled back and choking me."

One hour after treatment with phenobarbital by mouth and Benadryl® (dephenhydramine hydrochloride), the symptoms permanently abated.

The patient had had Compazine® (proclorperazine) prescribed in July, 1957, without adverse effect at that time.

Case 3. A 39-year-old well developed, well nourished white man was admitted to hospital April 28, 1958, with a depressed fracture of the nose caused when a wrench had fallen on him. Under local anesthesia the fracture was reduced. Postoperatively, the patient complained of severe headache, nausea and vomiting. On April 29 Compazine® spansules, 15 mg. three times a day were ordered. The nurse mistakenly wrote down 50 mg. spansules three times a day, and 45 mg. was given three times on April 29 and three times on April 30. The total amount of Compazine® administered in this 48 hour period was 270 mg. It was then discontinued.

At 10 a.m. on May 1, 30 hours after the Compazine® was discontinued, the patient became very restless, perspired profusely and thrashed about wildly in bed. He complained of difficulty in breathing, of being unable to open his mouth, and of pain down his right shoulder and arm and the right side of his face. At 11 a.m. the patient began having twitchings of his face and of the rest of his body. Both sides of his face were now painful and muscular twitching of face, tongue and body was noted. His tongue protruded and he said he had a feeling he was unable to retract it into his mouth. A neurosurgical consultation was obtained and an electroencephalograph was ordered. The only abnormalities noted were pronounced muscle contractions throughout the body. The patient was by then unable to open his mouth, and opisthotonos was present, with the head held dorsiflexed and to the left. He was sweating profusely. Sodium amytal 0.25 gm. was given intravenously and did not seem to improve the patient's condition. He was incoherent and uncooperative.

Upon consultation a diagnosis of "possible tetanus" was made and the patient was transferred to the contagious disease ward of the Los Angeles County General Hospital. There also a diagnosis of possible tetanus was made and a total of 150,000 units of tetanus antitoxin was given, 75,000 units intravenously and 75,000 units intramuscularly. Twelve hours later the symptoms diminished and in 24 hours entirely disappeared.

As a result of the tetanus antitoxin the patient later had an extremely severe serum sickness reaction, which incapacitated him for some time.

DISCUSSION

The foregoing case reports are submitted to emphasize the occurrence of trismus due to phenothiazine derivatives. Other reports have been made of protrusion of the tongue and inability to retract it in connection with use of these drugs.[4,9,12] The authors making the reports emphasized that previously only in postencephalopathic states had this phenomenon been noted. They also noted the presence of paresthesias within the mouth accompanying the trismus.

Jabbaur and co-workers[7] reported trismus, as well as other neurologic abnormalities, in four children who had received phenothiazine derivatives. Two of them had received amounts greater than suggested, one had taken an unknown amount and one had had only the recommended dosage. One of the three patients reported upon herein (Case 2) had the usually prescribed dosage.

Schering Corporation's brochure on Trilafon® (perphenazine) states: "Significant autonomic side effects have been infrequent in patients receiving less than 24 mg. per day by mouth." While patient in Case 1 in the present report ingested 32 mg. the first day, she took 24 mg. the second and only 8 mg. on the day of onset, or a total dose averaging less than 24 mg. a day. The brochure notes muscle spasm but does not mention trismus as a possible side effect, although "extrapyramidal symptoms have been observed which at times closely simulate those of the Parkinson syndrome." Schering's Division of Clinical Research[11] stated that "although infrequent, episodes of muscle spasm occasionally have been reported in patients receiving phenothiazine including perphenazine. This may occur within the therapeutic dose range but has disappeared following discontinuation of the drug." No statement as to the frequency of trismus was included. We have personal knowledge of at least one other case, in the Los Angeles area, of trismus following the administration of Trilafon.® A reply by Smith, Kline and French to a letter regarding their knowledge of Compazine® and trismus did not specify their experience.

Three cases within three months in one area of Los Angeles would imply a high incidence of trismus. Whether it occurs following the administration of other phenothiazine derivatives[4,9,12] is not known. Extrapyramidal findings, however, are not infrequent with high doses of Thorazine® (chlorpromazine) and occur with lower doses, too, although less frequently.[6,10] The brochure on Sparine® (promazine) states: "Extrapyramidal symptoms resembling Parkinson's syndrome have not occurred in patients receiving Sparine.® However, because of its structural relationship to other phenothiazine derivatives producing such side effects, patients receiving Sparine® therapy should be carefully observed." One can only concur with this statement.

The phenothiazines are known to abolish, as well as cause, muscle spasm, Parkinsonism and other extrapyramidal abnormalities.[1,2,3,8] This paradox has not been explained, although conjecture is not lacking.[1,3]

Epileptic seizures may also complicate phenothiazine administration.[5] Whether trismus medicamentosa (phenothiazine) may be due to such a seizure or whether it may be extrapyramidal in origin is unresolved.

Recognition of trismus as secondary to use of phenothiazine derivatives is important so that an erroneous diagnosis of tetanus may be avoided. The absence of a prior wound, the possible absence between spasms of hyperreflexia (although hyperreflexia has been reported with these compounds[4,7,9]) as well as the absence of abdominal muscle spasm, would make tetanus less likely. Protrusion of the tongue and inability to retract it at will, *may* be characteristic of trismus medicamentosa, but further observation is necessary regarding this.

Burlew[11] said that the following counter measures have been used for the muscle spasm encountered with use of these drugs: barbiturate sedatives; atropine or muscle relaxants; caffeine sodium-benzoate; various antihistamines; anti-parkinson drugs; codeine and/or aspirin; or calcium gluconate.

SUMMARY

Three cases of trismus, one due to perphenazine (Trilafon®) and the other two due to proclorperazine (Compazine®) administration, are presented. Inquiry about the possible prior ingestion of phenothiazines in a patient with trismus is mandatory, so that the patient will not be unnecessarily treated for tetanus.

4849 Van Nuys Boulevard, Sherman Oaks (Marcus).

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California MEDICINE

For information on preparation of manuscript, see advertising page 2

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EDITORIAL

Pharmaceutical Advertising

SENATOR KEFAUVER of Tennessee, a veteran campaigner, has been making headlines in Washington recently with his investigation into the cost and the advertising of pharmaceuticals. Even in the face of TV payola investigations and inter-service conflicts over the assignment of tax billions for ballistic missiles or other weapons of destruction, the coonskin-capped Tennesseean has taken the spotlight at the moment.

News reports and interpretive writings suggest that the senator has two principal complaints against the drug industry. One, that the price of drugs is needlessly high. Two, that the producing or marketing companies spend too much money advertising their products. The second item could well be interpreted as contributing to the first, with the implication that the public is being overcharged for essential products.

Mr. Kefauver's criticisms could lead to endless debates over the economics of advertising. Critics of this form of promoting sales suggest that the price of goods or services could be reduced if the expense of advertising did not have to be recovered in the ultimate sales price. On the other side, those who defend advertising make their case on the fact that advertising broadens the sales market and thus permits greater production at lower unit costs and, subsequently, lower sales prices to the public.

While the pharmaceutical industry may not fit exactly into the textbook pattern of economics, it is certainly affected by the volume of its sales and by its unit costs of production and sales alike. Obviously, full production of any drug item will permit all possible economies in costs, will provide a greater turnover of stocks with consequent financial return on the invested capital, and will lead to the possibility of decreasing prices which must eventually be paid by the public.

The variations of the industry from the economic norm come in the volume of research work which must be performed in order to produce new pharmaceutical items and in the sudden and unpredictable obsolescence of some products. It is easily possible for a firm to spend years of time and millions in money on a research project, only to have its work nullified overnight when a competitor announces something a little better a little sooner.

No brief need be made here for the pharmaceutical industry. The leaders in this field have been established for a number of years and have built their own reputations for honesty, integrity and service. When they advertise, their objective is just as much to keep the corporate name before the eyes of physicians as to promote a particular product in their line.

Neither need a stand be taken in behalf of the institution of advertising. The nation knows the story of William Wrigley, Jr., who amassed a fortune by selling five-cent packages of chewing gum and who advertised lavishly on the simple premise that if he stopped the public would soon forget the Wrigley name.

What the public is interested in—and the medical profession as the guardian of the public health—is the adequacy and the accuracy of pharmaceutical advertising. If Senator Kefauver would restrict his investigation to this facet of the matter, he would gain unlimited professional medical support.

A drug company, be it a large established firm or one of the numerous satellites that bask in the enthusiasm of the moment for a spectacular new product, should be expected to tell the truth about its products. This is especially true when drugs are presented to as critical and well-trained an audience as a group of physicians.

Advertising by its very nature is selling. And selling is inclined to expound on the good and submerge the bad. When this happens with a drug item, we can expect to be told what a new drug will accomplish and to be kept in the dark as to what side effects it may produce or what the contraindications are for its use. Granted that the New Drug Applica-

tion of the Food and Drug Administration and the literature packaged with the product itself cover these points, isn't there always a doctor somewhere with a problem case which has defied conventional treatment who may jump at the chance to effect a cure with something new which is played up as the answer to his prayer?

It is because of just such circumstances that publishers of medical journals have had to take a close look at pharmaceutical advertising in recent years. They welcome the advertising for its financial support; at the same time, they properly value the need for carefully screening it for the benefit of their readers.

This journal is probably more fortunate than many others in that it has maintained an active advertising committee for the past 14 years and has dealt first-hand with the problems emanating from a growing, ambitious and competitive industry. The fundamental requirements of this committee have consistently been that (1) the advertiser give complete information about his product, including formula, contraindications and cautions, and (2) that adequate scientific data be presented to justify the claims made for the product.

Strict adherence to these requirements can, and sometimes does, cause the loss of advertising pages where the advertiser is either unable or unwilling to meet the committee's requirements. When this happens, it is especially disheartening to the committee members to see other reputable medical publications accept the copy which has been rejected here.

Within the past few weeks the American Medical Association has come to grips with this problem and has produced a set of rules and standards which may well become nationwide in scope. The rules state plainly what will be required for the acceptance of advertising copy. They set forth the types of copy which are unacceptable in any circumstances (alcoholic beverages, tobacco, etc.) and they detail the type of supporting material which advertisers may be called upon to supply for favorable consideration of their offerings.

Particularly outstanding in these standards is the emphasis on the *quality* of scientific research which has gone into a product, in contrast with the *quantity* of such work. This requirement, if enforced, will eliminate some claims which are made on "a series of five cases" or comparable investigations.

The medical publisher must welcome new drug products, new uses for old products and new combinations which provide pharmaceuticals for use in additional therapy. These are in line with the rapid strides in the pharmaceutical field of today and are of value to the practicing physician in keeping up with modern therapy. At the same time, the publisher must look to his position of leadership among his readers and must safeguard their interests.

It is hoped that the American Medical Association will apply its new advertising standards with fairness, impartiality and firmness. If this is done, a new standard of excellence in pharmaceutical advertising will be established across the country, a standard which will be known and acceptable to all concerned —publishers, advertisers and advertising agencies. The ultimate beneficiaries will, of course, be the American people.

Letters to the Editor...

The Podiatrist and Medicine

PODIATRY serves the health needs in a specialized field; it has joined medicine and dentistry to bring better health to more people.

A little more than twenty years ago in the *Journal of the American Medical Association*, April 8, 1939, a report of its Judicial Council inferred that the profession of podiatry has much to offer to "medical practice in a limited field."

The San Francisco Medical Society stated, "Podiatry has become identified as an integral part of Medicine and Surgery in a specialized field."

Because Medicine, individually and collectively through its organizations, has long been a guardian of the nation's health and because of our deep interest in the nation's foot health, the American Podiatry Association shall continue to maintain and expand intimate and cordial liaison with medical and related health organizations to further foster mutual understanding.

At a joint conference of the American Medical Association and the American Podiatry Association officials two years ago, arranged by President Allman of the American Medical Association, the field representative of the American Medical Association, Mr. Thomas Hendricks, stressed the importance of acquainting medicine with modern podiatry-chiropody through liaison on the state association level.

In the State of California these past few years the liaison between California Medicine and Podiatry has progressed satisfactorily. In 1957 through the cooperation and advice of medicine a Chiropody Examining Committee within the State Board of Medical Examiners became a reality. The By-

Laws of the California Public Health League were amended to allow for the participation of podiatrists as active members. The profession of podiatry then became members of the Public Health League and the Allied Health Professions. In 1959 our liaison continued to progress with the election of a podiatrist as a councilor in the southern district of the Public Health League.

Podiatry in California is interested in the objectives of the League, among whose purposes are: To educate the public to the proper evaluation of medicine, dentistry, nursing, and the allied sciences; to gain enactment of laws affecting the greater usefulness of ethical medicine, dentistry, nursing, and the allied sciences; to protect the public health by opposing objectionable forms of medical, dental, and public health legislation.

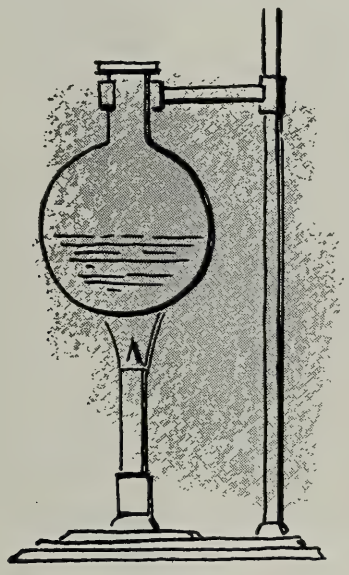
In June 1959 the President-elect of the American Podiatry Association was privileged to have an exhibit at the clinical meeting of the American Medical Association in Atlantic City. Our relations with organized medicine have never been more cordial or on a higher plane.

. . . We not only dedicate but further we now take this opportunity to rededicate our resources to service to the public. As in the past, we shall continue in our private practices and in the institutions we serve, to provide mankind the best possible foot health service and care.

The California Podiatry Association rededicates itself to continuing our intimate and cordial liaison with the California Medical Association, in particular, American Medicine in general, and to the fostering of mutually respectful understanding between its members.

4480 Crenshaw Blvd., Los Angeles 43.

ROBERT SHOR, D.S.C.
Vice President,
American Podiatry Association
Councilor,
California Public Health League.



California MEDICAL ASSOCIATION

NOTICES & REPORTS

Warren L. Bostick, M.D., New C.M.A. President-Elect

THE California Medical Association's new president-elect can be said to have come to that station almost by foreordained progression.

Warren L. Bostick, M.D., was president of his class all through medical school and upon his graduation from the University of California School of Medicine in 1939 he was awarded the gold headed cane which symbolizes outstanding aptitude and application in clinical medicine.

Since then he has participated actively in civic affairs and in both the scientific and the executive aspects of his local county medical society, the California Medical Association and the American Medical Association.

He is a pathologist and director of laboratories. He is on the faculty of the University of California School of Medicine, San Francisco, in the Department of Pathology, and is actively engaged in research. He lives in San Rafael and has an office there.



WARREN L. BOSTICK, M.D.

In Marin County, where he entered practice, Dr. Bostick at one time or another served as president of the county medical society, as a member of the society's board of directors for many years and as a member of the society's liaison committee with county supervisors.

For the state medical association, he has been secretary, then chairman of the Section on Pathology and Bacteriology in the annual scientific sessions. At the time of his election as president-elect, Dr. Bostick had been on the C.M.A. Council for eight years. There he became noted among his colleagues for calm analysis, gentle persuasiveness and amiable humor.

Other stations on the new president-elect's route to the highest post in his state medical association have been chairman of the Commission on Public Agencies, chairman of the Committee on Committees and chairman of the Committee on State Medical Services.

On the national level, he is a delegate to the American Medical Association.

Dr. Bostick began life in Texas but at age 3 moved to San Diego, where his father was a Navy physician.

Dr. Bostick is married to the former Virginia Lee of Berkeley, who is a registered nurse. They have two sons, Warren, age 17, and Bruce, 15.

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Actions at C.M.A. Annual Meeting

Members attending the 89th Annual Session of the California Medical Association in Los Angeles, February 20 to 24:

- Installed Dr. Paul D. Foster, Los Angeles, in the presidency.
- Elected Dr. Warren L. Bostick, San Rafael, president-elect.
- Applauded a speech by out-going President T. Eric Reynolds, Oakland, urging a private enterprise solution to the health problems of the over 65 population.
- Heard A.M.A. President Louis M. Orr warn of the dangers inherent in Forand-type legislation.
- Applauded the forceful address of California's Dr. E. Vincent Askey, president-elect of A.M.A.
- Set attendance records at the scientific sections which received exceptional coverage in the California press.
- Acted upon a record number (78) resolutions introduced in the House of Delegates.
- Reaffirmed support of the service concept of Blue Shield Plans.
- Gave support anew to California's nationally acclaimed Relative Value Study.
- Saluted the many years of service of Donald D. Lum, who this year retired as chairman of the Council. (He was elected an alternate delegate to the A.M.A.)
- Recognized Dr. Francis J. Cox, who retired as chairman of the Medical Services Commission, for his contributions to the public and the profession with his work in the industrial accident field and in the continuing development of the Relative Value Study.
- Voted additional funds for enlarged C.M.A. services to members and for an expanded public relations program.
- Set the annual dues at $70 (which includes $10 per member for the American Medical Education Foundation).
- Attended the Presidents' Dinner Dance in record numbers (the Woman's Auxiliary having joined in ticket sales for the first time).

ELECTED OFFICERS

Newly elected officers of California Medical Association are as follows: Dr. Paul D. Foster, Los Angeles, president; Dr. Warren L. Bostick, San Rafael, president-elect; Dr. James C. Doyle, Beverly Hills, speaker, House of Delegates; Dr. Ivan C. Heron, San Francisco, vice-speaker.

Appointments—Dr. Matthew N. Hosmer, San Francisco, secretary, and Dr. Dwight L. Wilbur, San Francisco, editor of CALIFORNIA MEDICINE.

District Councilors

Reelected to C.M.A.'s Council were the following: Drs. William F. Quinn, Los Angeles; Joseph P. O'Connor, Pasadena; and Samuel R. Sherman, San Francisco.

Newly elected Council members are Drs. Wilbur G. Rogers, Glendale; John F. Murray, Fresno; Albert G. Miller, San Mateo; and John G. Morrison, San Leandro. The Council appointed Dr. Carl E. Anderson, Santa Rosa, to fill the unexpired term (1961) of Dr. Warren L. Bostick.

Dr. Sherman was elected chairman of the Council at its organization meeting immediately following the adjournment of the House of Delegates. Dr. Ralph C. Teall, Sacramento, was named vice-chairman.

A.M.A. Delegates, Alternates

(For 2-year terms 1961-1962)

Delegates—Drs. Leopold H. Fraser, Richmond; Arthur A. Kirchner, Los Angeles; Dwight L. Wilbur, San Francisco; J. Norman O'Neill, Los Angeles; J. Lafe Ludwig, Los Angeles; Burt L. Davis, Palo Alto; A. A. Morrison, Ventura; James E. Feldmayer, Exeter; and H. Milton Van Dyke, Long Beach, were named as delegates to A.M.A.

Alternates—Alternate delegates elected were Drs. Hartzell H. Ray, San Mateo; James C. Doyle, Beverly Hills; Francis J. Cox, San Francisco; William F. Quinn, Los Angeles; Samuel R. Sherman, San Francisco; Leon P. Fox, San Jose; Donald D. Lum, Alameda; Ralph C. Teall, Sacramento; Omer W. Wheeler, Riverside.

Dr. Malcolm C. Todd, Long Beach, was elected alternate delegate for the unexpired term of Dr. Kirchner, ending December 31, 1961.

Blue Shield Trustees

Reelected to three-year terms to the board of trustees of C.P.S. were the following: Drs. Dudley M. Cobb, Los Angeles; John R. Hilsabeck, Santa Ana; and John G. Morrison, San Leandro. Mr. Ransom N. Cook, San Francisco, was also reelected.

The two new board members are Drs. Herman H. Stone, Riverside; and William H. Thompson, Burlingame.

Council Meeting Minutes

Minutes of the 455th Meeting of the Council, Hilton Inn, San Francisco Airport, January 9, 1960.

The meeting was called to order by the chairman in the Hilton Inn, located at San Francisco Airport, on Saturday, January 9, 1960, at 9:30 a.m.

Roll Call:

Present were President Reynolds, President-Elect Foster, Speaker Doyle, Vice-Speaker Heron, Councilors MacLaggan, Wheeler, Todd, Quinn, O'Neill, Kirchner, O'Connor, Shaw, Gifford, Harrington, Davis, Sherman, Campbell, Lum, Bostick and Teall, Secretary Hosmer and Editor Wilbur.

A quorum present and acting.

Present by invitation were Messrs. Hunton, Thomas, Clancy, Whelan, Collins, Marvin, Edwards and Salisbury and Doctor Batchelder of CMA staff; county executives Scheuber of Alameda-Contra Costa, Jensen of Fresno, Pettis and Field of Los Angeles, Bannister of Orange, Brayer of Riverside, Donmyer of San Bernardino, Nute of San Diego, Neick of San Francisco, Somerville of Napa and Donovan of Santa Clara; Messrs. Paolini and Lyon and Doctor Larsen of California Physicians' Service; Doctor Malcolm Merrill, State Director of Public Health; Doctor John Keye of the State Department of Social Welfare; Doctors Francis E. West and Arlo A. Morrison, past presidents; Doctor Albert Miller and Doctor Henry Brown, president, of the San Mateo County Medical Society; Doctor Roberta Fenlon, president of San Francisco Medical Society; Doctor John G. Morrison, president of Alameda-Contra Costa Medical Society; Doctor Leopold A. Snyder, president of the Fresno County Medical Society; Doctor Dan O. Kilroy, and others.

1. *Minutes for Approval:*

On motion duly made and seconded, minutes of the 454th meeting of the Council, held December 12, 1959 were approved.

2. *Membership:*

(a) A report of membership as of January 7, 1960, was presented and ordered filed.

(b) On motion duly made and seconded, four delinquent members whose 1959 dues had been received were voted reinstatement.

(c) On motion duly made and seconded in each instance, four applicants were voted Associate Membership. These were: Lawrence H. Winter, Alameda-Contra Costa; Kurt J. Elsbach, Los Angeles County; Burton L. Zinnamon, Sonoma County, Mary Allen, Tulare County.

(d) On motion duly made and seconded, five members were voted a reduction of dues because of illness or postgraduate study.

3. *Unfinished Business:*

On report that the Council had not taken definitive action on a resolution from the 1956 House of Delegates, relating to narcotics addiction, it was duly moved, seconded and voted that this subject be referred to the Commission on Public Agencies for study and report back to the Council.

4. *Report of the President:*

President Reynolds reported on a request received from the National Foundation for nominees for appointment to a scholarship selection committee. On motion duly made and seconded, it was voted to authorize the Chairman of the Council to make such nominations.

5. *Report of President-Elect*

President-Elect Foster presented a check (for $8,800) received from Wyeth Co. to aid in the publication of *Medical Dates Bulletin* by the Committee on Postgraduate Activities. On motion duly made and seconded, it was voted to accept this contribution with thanks and a commendation for this service to the medical profession.

6. *Committee on Finance:*

(a) Chairman Heron of the Committee on Finance presented a proposed budget for the 1960-1961 fiscal year. Following general discussion, it was agreed that several additional detailed reports be made available to the members of the Council so that final action on the budget could be taken prior to the 1960 Annual Session.

(b) Doctor Heron also presented a report of the current financial status, which was ordered filed.

(c) Doctor Heron reported that a request from the Woman's Auxiliary for additional funds for publication of its journal could be met without an additional appropriation.

7. *Committee on Committee Nominations:*

Doctor Bostick reviewed the tentative list of nominations for commission and committee appointments, which is subject to Council and House of Delegates approval. The Chairman stated that the list will be sent to each Councilor and action thereon is deferred to next Council meeting. On motion duly made and seconded, it was voted to appoint the members of the Committee on Traffic Safety as members of a standing committee.

8. *Delegates to A.M.A.:*

The secretary read a letter from Doctor Donald Cass, chairman of the Delegates to the American Medical Association, in which he praised the effectiveness and devotion to duty of the Delegates and Alternates to the A.M.A.

9. *Commission on Medical Services:*

(a) Mr. Hassard reported that Mr. Richard Lyon of California Physicians' Service and several of his associates are visiting county societies to assist them in preparation of data regarding the care of the aged.

(b) Doctor Sherman reported that Doctor Batchelder and Messrs. Whelan and Lyon had reviewed the program for the aged operating in Santa Cruz County and would make a report on it later.

(c) On motion duly made and seconded, it was voted to commend most highly Doctor Francis J. Cox, retiring as chairman of the Commission on Medical Services, for his long and effective services to the Association.

10. *Commission on Community Health Services:*

(a) Doctor MacLaggan reported that the Committee on Traffic Safety wished to be able to call in specialists for consultation on various aspects of its program. On motion duly made and seconded, authority to expand the consultation services of the committee was voted.

(b) A request for Association representation on a voluntary organization for rehabilitation was received and it was agreed that the Committee on Rehabilitation arrange to evaluate the organization and its program.

(c) A report on the medical needs of farm labor was presented and discussed. On motion duly made and seconded, it was voted to accept limited portions of this report as policy and to allow the use of other portions for information and discussion purposes. The sections approved as policy found that farm labor in California today is no longer migratory, that former migrants have now achieved citizenship and should not be separated from other welfare cases when in financial need. Mexican nationals, who are migratory, were not included in this consideration.

11. *Governor's Commission on Health Needs:*

Report was made that the Governor's Commission on the Health Needs of California, of which Doctors Reynolds and Foster are members, would meet soon and that the two CMA representatives would probably need staff assistance. On motion duly made and seconded, it was voted to provide Doctors Reynolds and Foster with all indicated staff assistance.

On motion duly made and seconded, it was voted to establish an advisory committee to Doctors Reynolds and Foster in this activity, the Council chairman to name such committee. The chairman named Doctors Lum, Sherman, West and Kilroy to this body.

12. *Commission on Public Policy:*

Doctor Kilroy reported that two measures would soon be under consideration for legislative action relating to health insurance coverage for State employees. One would provide for state contributions to health insurance costs for employees, the other to establish a state commission to regulate the type of coverage to be purchased. On motion duly made and seconded, it was voted that the Council reaffirm its earlier policy in support of the State contributing *as an employer* to the cost of health insurance for State employees.

A report with recommendations for the conduct of physicians in hospitals, developed by a joint committee of the Association and the California Hospital Association, was presented. On motion duly made and seconded, it was voted to approve in principle the "Guiding Principles—Hospital Relationships" subject to further clarification in the implementation portion at the close of the report.

Doctor Kilroy also presented an outline of a public relations program, together with its estimated cost, in response to Resolution No. 18 of the 1959 House of Delegates, which was referred to the Commission on Public Policy for study and report to the Council.

On motion duly made and seconded, it was voted to table any Council action at this time on a recommendation on this report.

On motion duly made and seconded, it was voted to authorize the Commission on Public Policy to present this outline to the 1960 House of Delegates.

13. *Commission on Professional Welfare:*

Doctor Kirchner reported that the Committee on the Private Practice of Medicine in Medical Schools had taken no further action on a situation referred to it from Santa Clara County, since it was felt that the matter had been adequately resolved at the local level.

14. *State Department of Public Health:*

Doctor Malcolm Merrill, State Director of Public Health, reported on a serious outbreak of rabies in Imperial County, on which state authorities are working with Mexican authorities in controlling rabid dogs in the border area.

Doctor Merrill also reported that California had registered 430 cases of poliomyelitis in 1959, only 17 of which were fatal. Of the fatalities, one was a person who had had a course of three injections of Salk vaccine. The vaccine, he reported, was still regarded as about 85% effective where three injections are given.

15. *California Physicians' Service:*

Doctor Arlo A. Morrison gave a progress report on California Physicians' Service, which showed 781,000 members at the close of 1959, or some 45,000 more than a year earlier. Employees at the year-

end totaled 635, compared with 718 at the end of 1958, and total administrative costs were 10.5% of income. CPS is now handling 58,000 claims monthly and in 1959 only 1,100 claims were deemed questionable enough to be referred to county review committees.

California Physicians' Insurance Corp., Doctor Morrison reported, now has an income of more than $1,100,000 annually.

16. *Legal Department:*

Mr. Hassard reported that several By-Law amendments voted by the Council had been prepared and would be introduced in the 1960 House of Delegates as emanating from the Council. He also reported that two suits pending against the Association or its officers were still before the courts but not endangering the CMA or its officers at this time.

17. *Hospital Construction Requirements:*

Doctor MacLaggan presented a resolution from a member in San Diego County, who asked that a review be made of rules and regulations governing fire safety provisions for certain equipment installed in hospitals. On motion duly made and seconded, it was voted to refer this to the Liaison Committee with the California Hospital Association.

18. *Veterans' Administration:*

On motion duly made and seconded, it was voted that the Council urge the American Medical Association to investigate the policies of the Veterans' Administration as to admissions, construction programs and other matters.

19. *1960 House of Delegates:*

Speaker Doyle reported that the proposed report of the Committee on Social Security Poll Format would be presented to the House of Delegates for decision.

Doctor Doyle also announced that the presidents of allied organizations would be invited to attend the opening session of the House of Delegates.

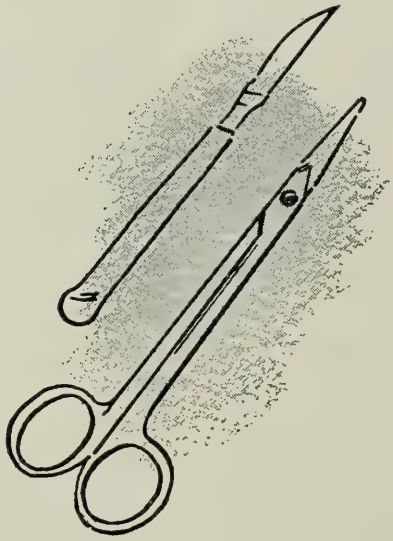
20. *Council Meeting Dates:*

On motion duly made and seconded, the Council approved a *proposed* schedule of Council meetings for 1960 which called for ten meetings during the calendar year.

Adjournment:

There being no further business to come before it, the meeting was adjourned at 4:20 p.m.

DONALD D. LUM, M.D., *Chairman*
MATTHEW N. HOSMER, M.D., *Secretary*



10th ANNIVERSARY

POSTGRADUATE INSTITUTE

SOUTHERN COUNTIES

Presented by Stanford University School of Medicine, Lowell A. Rantz, M.D., Associate Dean and Director of Postgraduate Medical Education, and California Medical Association Committee on Postgraduate Activities.

Riviera Hotel, Palm Springs

April 21-22, 1960

PROGRAM

THURSDAY, APRIL 21

Morning Session

9:30-10:15—**Diagnosis of Adrenal Disorders**—Thomas August, M.D.

10:15-11:00—**Physiology of the Endocrine Glands**—Alan K. Done, M.D.

11:15-12:30—**Two Concurrent Panels** (you may go to the one of your choice).

PANEL 1—Sex and the Adrenals.

PANEL 2—Use and Abuse of Adrenal Steroids.

Afternoon Session

2:00-2:45—**Fundamentals of Intestinal Absorption**—Raymond M. Kivel, M.D.

2:45-3:30—**Pancreatic Insufficiency**—Louis Gluck, M.D.

3:45-5:00—**Two Concurrent Panels** (you may go to the one of your choice).

PANEL 1—Malabsorption Syndromes in Adults.

PANEL 2—Malabsorption Syndromes in Children.

6:30-7:30—**No-Host Cocktail Party.**

7:30-10:00—**Dinner** (wives invited).

Social Dimensions of Health and Disease—Edmund H. Volkart, Ph.D.

FRIDAY, APRIL 22

Morning Session

9:30-10:15—**Renal Physiology in the New Born**—Sumner Yaffe, M.D.

10:15-11:00—**Pyelonephritis**—Lowell A. Rantz, M.D.

11:15-12:30—**Two Concurrent Panels** (you may go to the one of your choice).

PANEL 1—Medical Disease of the Kidney.

PANEL 2—Disturbances of Body Fluids in Renal Diseases.

Afternoon Session

2:00-2:45—**Medical Management of Lymphoma**—William P. Creger, M.D.

2:45-3:30—**Radiotherapy of Lymphoma**—Malcolm A. Bagshaw, M.D.

3:45-5:00—**Two Concurrent Panels** (you may go to the one of your choice).

PANEL 1—Specific Problems in the Treatment of Lymphoma.

PANEL 2—Diagnosis and Treatment of Erythroblastosis.

HOST: Riverside County Medical Association . . . **REGIONAL CHAIRMAN:** Robert M. Zweig, M.D., 7004 Magnolia, Riverside. **INSTITUTE FEE:** $15.00. For additional information contact Postgraduate Activities office, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5. **All California Medical Association members and their families are cordially invited to attend.**

In Memoriam

CORRECTION: The February issue of California Medicine contained, by error, a notice of the death of Joseph Harvey Marcus of Los Angeles. Dr. Marcus is still in practice in Los Angeles.

A Dr. Joseph H. Marcus did die at the time reported, but he was a retired physician, who dwelt but did not practice in Los Angeles.

The error came about through a misreading of adjacent entries in the A.M.A. Medical Directory.

Babcock, Claude Elliott. Died in Los Angeles, January 26, 1960, aged 52, of coronary occlusion. Graduate of College of Medical Evangelists, Loma Linda-Los Angeles, 1934. Licensed in California in 1936. Doctor Babock was a member of the Kern County Medical Society.

✤

Barker, Joseph Michael. Died in Washington, D. C., January, 1960, aged 49, of heart disease. Graduate of Georgetown University School of Medicine, Washington, D. C., 1939. Licensed in California in 1955. Doctor Barker was a member of the Los Angeles County Medical Association.

✤

Bucknam, Ralph Waldo Emerson. Died January 29, 1960, aged 87. Graduate of Bowdoin Medical School, Brunswick-Portland, Maine, 1895. Licensed in California in 1908. Doctor Bucknam was a life member of the Los Angeles County Medical Association.

✤

Cobbs, Peter Price. Died in Los Angeles, February 1, 1960, aged 69, of injuries from an auto collision. Graduate of Howard University College of Medicine, Washington, D. C., 1919. Licensed in California in 1923. Doctor Cobbs was a member of the Los Angeles County Medical Association.

✤

Cummins, Joseph L. Died September 18, 1959, aged 57, by drowning. Graduate of College of Medical Evangelists, Loma Linda-Los Angeles, 1941. Licensed in California in 1945. Doctor Cummins was a member of the Los Angeles County Medical Association.

✤

Drake, James Carl. Died in Fresno, October 7, 1959, aged 76, of generalized lymphosarcoma. Graduate of Washington University School of Medicine, St. Louis, Missouri, 1911. Licensed in California in 1918. Doctor Drake was formerly a retired member of the Fresno County Medical Society and the California Medical Association and an associate member of the American Medical Association.

✤

Ealy, John Taylor. Died in Hohenwald, Tennessee, January 19, 1960, aged 42, in an airplane crash. Graduate of Temple University School of Medicine, Philadelphia, Pennsylvania, 1941. Licensed in California in 1951. Doctor Ealy was a member of the Los Angeles County Medical Association.

✤

Gramlich, Henry Frank. Died in Long Beach, February 4, 1960, aged 62. Graduate of the University of Buffalo School of Medicine, Buffalo, N. Y., 1920. Licensed in California in 1921. Doctor Gramlich was a member of the Los Angeles County Medical Society.

Holzman, Earl E. Died in Pacific Palisades, January 28, 1960, aged 35, by electrocution in a home accident. Graduate of University of Wisconsin Medical School, Madison, 1948. Licensed in California in 1949. Doctor Holzman was a member of the Los Angeles County Medical Association.

✤

Inman, Thomas George. Died in San Francisco, January 10, 1960, aged 87. Graduate of Cooper Medical College, San Francisco, 1894. Licensed in California in 1894. Doctor Inman was a retired member of the San Francisco Medical Society and the California Medical Association, and an associate member of the American Medical Association.

✤

Murray, Leo Charles. Died January 29, 1960, aged 60. Graduate of Washington University School of Medicine, St. Louis, Missouri, 1924. Licensed in California in 1943. Doctor Murray was a member of the Los Angeles County Medical Association.

✤

Naeckel, Harold William. Died in Los Angeles, January 29, 1960, aged 62. Graduate of Indiana University School of Medicine, Bloomington-Indianapolis, 1925. Licensed in California in 1930. Doctor Naeckel was a member of the Riverside County Medical Association.

✤

Plannette, Herbert Leslie. Died January 12, 1960, aged 83. Graduate of University of Wooster, Medical Department, Cleveland, Ohio, 1905. Licensed in California in 1915. Doctor Plannette was a retired member of the Los Angeles County Medical Association and the California Medical Association, and an associate member of the American Medical Association.

✤

Potekin, Jesse Sanford. Died January, 1960, aged 55. Graduate of University of Minnesota Medical School, Minneapolis, 1931. Licensed in California in 1946. Doctor Potekin was a member of the Los Angeles County Medical Association.

✤

Quattlebaum, Leon. Died in San Pedro, January 25, 1960, aged 36. Graduate of University of Arkansas School of Medicine, Little Rock, 1946. Licensed in California in 1954. Doctor Quattlebaum was a member of the Los Angeles County Medical Association.

✤

Richardson, Arthur L. Died in Arcadia, January 4, 1960, aged 57. Graduate of University of Michigan Medical School, Ann Arbor, 1932. Licensed in California in 1933. Doctor Richardson was a member of the Los Angeles County Medical Association.

✤

Snell, Albert Markley. Died in Palo Alto, February 6, 1960, aged 64, of heart disease. Graduate of University of Minnesota Medical School, Minneapolis, 1918. Licensed in California in 1947. Doctor Snell was a member of the Santa Clara County Medical Society.

✤

Titus, Jerome Hill. Died in Ontario, February 8, 1960, aged 83. Graduate of Rush Medical College, Chicago, 1900. Licensed in California in 1914. Doctor Titus was a member of San Bernardino County Medical Society.

PUBLIC HEALTH REPORT

MALCOLM H. MERRILL, *M.D., M.P.H.*
Director, State Department of Public Health

In 1959 there were 43 cases of tetanus reported in California, with 22 deaths. Victims of tetanus are urban-suburban residents and not the "traditional" rural dweller commonly associated with the disease.

A study of data on the nature of injury and type of wound indicates the majority of the cases occurred as the result of home puttering. According to the Bureau of Acute Communicable Diseases, the most frequent injuries associated with tetanus were puncture wounds caused by nails, toys, and splinters in the course of home repair work, gardening and yard cleaning. Another common injury was laceration of fingers while operating power lawn mowers. Other reports of injuries noted in connection with tetanus were: "Cut hand in electric fan blades," "caught hand in food chopper," "sores on hand while repairing house," "laceration of arm on lawn sprinkler," "dropped furniture on foot," and "finger caught in washing machine wringer."

The cases were reported from urban areas such as Los Angeles, Pasadena, Long Beach, Sacramento, Alameda and Santa Barbara.

More than 90 per cent of the patients either had never been immunized with tetanus toxoid or had not received a booster injection within five years of onset.

The causative organism of tetanus is a natural inhabitant of soil and of the intestinal tract of man and animals, so perpetual reseeding of these organisms occurs in man's environment.

Universal immunization with tetanus toxoid provides the potential means of protection. The occurrence of tetanus can be considered to be the result of what has been termed "unassimilated progress." An effective vaccine is available, but it has not been used on the broad scale desirable for protection of the civilian population. The armed services routinely protect their personnel by tetanus immunization.

* * *

By mid-February influenza and the attendant ills of wintertime had not seriously invaded northern California, and were reported on the wane in the southern sector of the State. Influenza A, the Asian strain, was identified in many areas of California in the department's Viral and Rickettsial Disease Laboratory.

It left in its wake in Los Angeles, however—an exceedingly high number of deaths in older people attributed to influenza and pneumonia, particularly the latter. During the four weeks in January deaths numbered 35, 80, 102 and 159. Approximately two-thirds of the deaths were reported from Los Angeles County and City, and 54 per cent of those who died were persons over the age of 70. The number of deaths in that month is substantially higher than for any week recorded during the outbreak of Asian influenza in 1957-58.

* * *

A report on the health of California's older people was published recently and distributed to agencies and individuals concerned with the health aspects of aging. The report appears at a time when interest is high in the entire problem of aging, as evidenced by the plans for the Governor's Conference on Aging in California this year, and for the White House Conference on Aging in 1961.

The report covers mortality in the older age group, nature and extent of illnesses, the medical care they receive, special health problems of older people, and current efforts to meet them.

Copies of the report may be obtained on request to the Bureau of Chronic Disease, State Health Department, 2151 Berkeley Way, Berkeley.

* * *

A documentary film has just been completed showing some of the adverse after-effects of Western Encephalitis on infants and young children. The film is based on findings of the Encephalitis Clinical Followup Study, a research project of the Stanford University School of Medicine and the State Department of Public Health.

The film shows 20 children who have been examined in the followup study clinics. The children shown who had Western Encephalitis before the age of four months emphasizes the severe, permanent damage caused by this virus infection when it occurs in very young infants. Pictures of other children who were past infancy when they had Western Encephalitis illustrate that older children also may be left with permanent motor and intellectual impairment.

The film can be borrowed from the departmental film library in the Bureau of Health Education.

* * *

As of November 1, 1959, 1,850 communities in the nation serving 36,138,430 people were fluoridating their water supplies. In addition,there were more

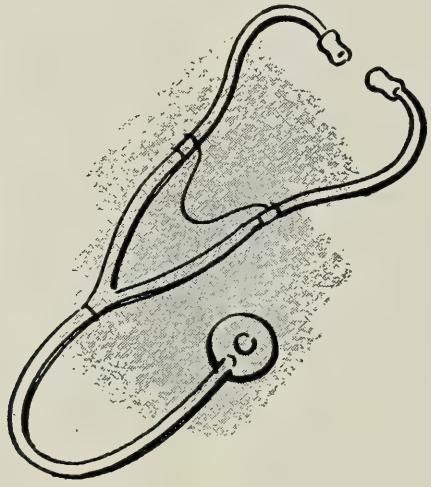
than seven million people in 1,903 communities using water supplies with a natural floride content at the approximate recommended level.

In California, 27 communities have approved fluoridation and 19 of these are presently supplementing their water supplies with fluorides. The largest community fluoridating in California is San Francisco.

In all, approximately 1,200,000 people are receiving water supplemented with fluoride. In addition, about three million people in California are ingesting water whose natural fluoride content ranges between 0.3 and 2.0 parts per million. The largest community having natural occurring fluorides in its water supplies is Los Angeles.

Several cases of food poisoning due to chemicals have been investigated by the department recently. Similarities in the cases were noted in incubation time, type of onset, clinical symptoms and duration. In each case a commercial dehydrated fruit beverage had been prepared in a metal container. Containers used were a copper kettle, an old tin-lined copper pitcher, and a galvanized iron container. After mixing, the drinks were allowed to stand in these metal containers for some time.

Fruit acids are known to have a particularly corrosive action on copper, zinc, pewter and other such metals. For this reason containers used for mixing fruit juice beverages should be of glass, plastic, crockery, or unchipped enamel ware.



WOMAN'S AUXILIARY
TO THE CALIFORNIA MEDICAL ASSOCIATION

THE THIRTIETH annual Convention held in February at the Ambassador Hotel in Los Angeles brought to a close the 1959-1960 State Auxiliary year.

Membership

Our membership as of January 15th had reached 6,606, and with four and a half months remaining in the National Auxiliary's fiscal year we may well exceed the 7,000 mark this year.

Much credit is due our membership chairman, Mrs. Warren Bostick, first vice-president of the Woman's Auxiliary to the California Medical Association for 1959-1960. She obtained the names of the doctors' wives in the counties where there is no auxiliary and wrote to 187 women, inviting them to become members-at-large of the State Auxiliary. Through her efforts we now have 12 of our 15 unorganized counties represented by members-at-large. As we recruit new members for the auxiliary we expand our efforts and increase our potential for helping organized medicine.

A.M.E.F. Contributions

A report from the State American Medical Education Foundation chairman, on February 8, showed that approximately $9,500 had been received for A.M.E.F. from the combined county auxiliaries.

Our Nurse Recruitment program was expanded this year to include para-medical careers. Auxiliaries have been encouraged to sponsor the type of club that is best suited to their own community needs. Our objective is to provide all high schools with guidance, scholarship information and program material. In this way, we hope to provide students with the means of selecting the career that is best suited to their abilities.

Future Nurse Clubs

There are over 200 Future Nurse and Career clubs sponsored by the medical auxiliaries in California with a membership of approximately 10,000 students.

The Oakdale Future Nurse Club, sponsored by the Woman's Auxiliary to the Stanislaus County Medical Society, was the first club in California to receive a national charter for a Future Nurse Club. For this reason, the Oakdale Club has been asked to select one of its members to be a delegate from California to the White House Conference on Children and Youth to be held in Washington, D. C., March 27-April 1, 1960. There will be four Future Nurse Club members at the Youth Conference, one from each region of the United States.

It is an honor to have had a representative from one of *our* Future Nurse Clubs in California chosen to attend this meeting.

Physicians' Benevolence

Since 1941 the Woman's Auxiliary has been contributing to the Physicians' Benevolence Fund. Over $2,000 has been received this year from the county auxiliaries for Physicians' Benevolence.

To better acquaint the auxiliary members and interested doctors with the facilities and care given at the Physicians' Aid Home in Los Angeles, the Board of Directors of the Physicians' Aid Association held open house on February 22, from 5 to 7 p.m. The home is supported by the entire medical profession—as an investment in security—not a charity. Incidentally, gifts to the Physicians' Aid Home are tax-deductible.

Program for Aging

Our new project this past year was aiding the California Medical Association in its program for the aging.

Some of the county auxiliaries laid the groundwork for "Visiting Homemaker Service" in their communities to aid this program. The Community Homemaker Service is a locally sponsored, nonprofit agency that places trained workers in homes where illness, disability or the absence of a parent might disrupt the normal family routine. They take over the household tasks such as marketing, cooking, light cleaning and caring for children. Service is part-time only for as long as needed. No nursing care is given by the homemaker.

The American Medical Association's interest in Homemaker Service was evident in February, 1959, when the Association played a key role in promoting and financing the first nationwide conference on homemaker services in Chicago.

The patient or family pays a central office an established fee per hour for the time the homemaker works, plus transportation costs.

Before organizing a visiting Homemaker Service in a community, approval of the medical profession and allied groups must be obtained.

There are only 150 such services in 3,100 counties in the United States, others are in the process of being set up.

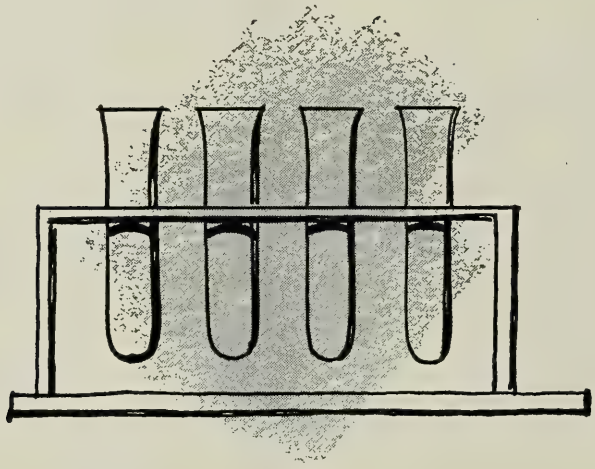
Valedictory

Thus the combined efforts of the 34 organized county auxiliaries in California have continued to carry out our most important objectives: to assist the California Medical Association in its program for the advancement of medicine and public health and to promote better public relations.

It has been a privilege and pleasure to work with the C.M.A. during the year and to have had this page in CALIFORNIA MEDICINE to tell our auxiliary story to all the members.

My sincere thanks to the Advisory Board and the staff of the C.M.A. office for their assistance this past year.

MRS. THEODORE A. POSKA
President, Woman's Auxiliary to the California Medical Association



INFORMATION

Guides for Medical Education Efforts by the Drug Industry

IN THE INTEREST of providing a guide for the pharmaceutical industry so that its efforts to further medical education shall follow the highest standards, the following general principles have been established by the Pharmaceutical Manufacturers Association and the Association of American Medical Colleges:

Surveys of medical students by questionnaire or other form made by the industry or members thereof, rarely result in the furtherance of medical education. The Association of American Medical Colleges is available for consideration of exceptions to this general statement and should be consulted to determine whether an exceptional survey is in keeping with these general principles.

Non-educational entertainment (such as cocktail parties, steak dinners, etc.) does not further medical education and such entertainment should not be requested by students or faculty or suggested by members of the industry.

Awards and prizes. Funds or other awards intended as recognition of a high order of scholarship or of research achievement of students or faculty members are an effective means of furthering medical education. The interest of the recipient is best served through his uninfluenced selection by his medical school and by the omission of photographs or press releases by the donor.

Lectures at institutes of learning, established by members of the pharmaceutical industry constitute a means of bringing special information to medical students and therefore are of value in medical education. The final choice of individual speakers should be made by the medical school concerned, in the interest of providing the best possible source of information on a specific subject.

Visits to pharmaceutical laboratories constitute a source of medical education which is not available in medical colleges. The visits are therefore considered worthwhile but the general principles regarding entertainment (except for necessary meals), printed literature and drug samples should apply to the occasion of such visits.

The release of information regarding research products prior to their acceptance by the medical profession is not in the best interest of the American public. Such releases are discussed in the "Statement of Principles of Ethical Drug Promotion," adopted by the Pharmaceutical Manufacturers Association, May 24, 1958. Because of this general principle, press releases on unestablished drugs should not be made by members of the industry or by medical colleges. In addition, press releases on established drugs when students or faculty members of a medical college are involved, should follow the established practices of the medical college concerned.

Television or radio productions involving medical colleges or research efforts in such colleges should be invariably presented in a way that the greatest possible degree of medical education is obtained from the production. Unnecessary dramatization or other accent of material which does not provide educational information is discouraged and to be avoided.

Printed literature of pharmaceutical manufacturers is frequently of considerable value in medical education. The use of educational literature by students is encouraged but the interest of the student is best served by its distribution through a qualified official of the medical school concerned.

Drug specimens are an important part of the education of a medical student. However, it is illegal for a student to receive prescription drugs for other than study purposes, which study should be conducted in his formal class sessions. For this reason, prescription drug samples should be made available for use by students only through a qualified official of the medical college concerned.

The above paragraphs cover subjects which are representative of certain specific undesirable practices although the list is by no means exhaustive. In general, as a basic guiding principle, both the medical educators and the leaders of the pharmaceutical industry can agree that any act, practice or policy which tends to result in the exploitation of the medical school, educator or student for commercial or selfish consideration is undesirable. Therefore, there can be no furthering of such acts, practices or policies by anyone who is truly interested in the future health and strength of medical education.

Additions to or modification of these general principles should result from continuing conference between designated members of the two associations concerned.

Medicare Changes

The office of Dependents Medical Care of the Department of Defense has issued the following instructions:

DD 1173, Uniformed Services Identification and Privilege Card

As of April 1, 1960, Medicare claims may be processed for services rendered eligible Medicare dependents when the DD 1173, Uniformed Services Identification and Privilege Card, has not been furnished a physician's office by the dependent. In those instances where the DD 1173 is not available, the Medicare billing DA 1863 must be documented in one of the following ways in order for payment to be made:

1. Emergency Cases

The claim form must contain a statement by the attending physician certifying that the case was an emergency and must be accompanied by one of the following types of identification:

a. A statement by the local military Commander that the patient was a Medicare dependent eligible for care in civilian facilities during the period covered by the billing.

b. Any other official uniformed services document reflecting that the patient was a Medicare dependent eligible for care in civilian facilities during the period covered by the billing.

c. A statement of the physician or hospital authority that he has personal knowledge that the patient was a Medicare dependent eligible for care in civilian facilities during the period covered by the billing.

d. Other civilian type identification such as a social security card, driver's license, etc., which identifies the

dependent signing the billing form. Physicians' offices should make sure that the name of the identification document is the same as that signed on the claim form by the dependent.

e. When a claim is submitted without information from the DD 1173, the reason as to why the card is not available should be furnished.

2. Nonemergency Cases

When the DD 1173 is not available at the time of commencement of care and an emergency does not exist, the dependent may commence receiving care as a potential beneficiary, but before payment can be made the claim must be documented in one of the following manner:

a. A statement from a military official authorized to issue the DD 1173 may be attached to the billing form, indicating that the patient was eligible for Medicare benefits during the period covered by the billing. This statement must include name, rank or grade, and position of the issuing official and a statement that he is authorized to issue the DD 1173.

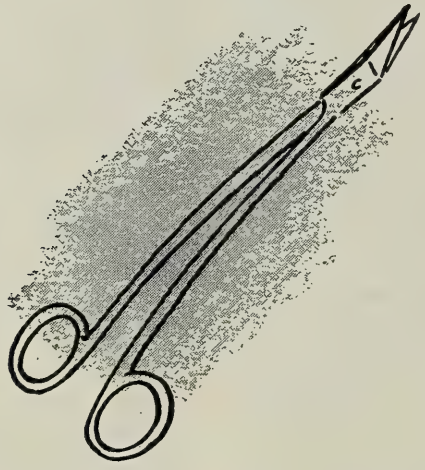
b. When the issue date of the DD 1173 is later than the date the care commenced, it is necessary that a letter from a military official authorized to issue the DD 1173 be attached, indicating that the patient was eligible for Medicare benefits during the period covered by the billing.

Procurement of Blood

In those instances when blood is not available to Medicare dependents on a gratuitous basis, reimbursement will be made for the purchase of the required amounts. In instances where blood must be purchased, the billing should be made on the hospital claim, not on the physician's billing.

Non Availability Statement

The Medicare permit (DD Form 1251), which is issued by military bases when civilian care is requested for dependents residing with the serviceman, is being changed to read "NON AVAILABILITY STATEMENT, DEPENDENTS' MEDICAL CARE PROGRAM." DD Forms 1251 bearing either of these titles are equally acceptable.



NEWS & NOTES

NATIONAL • STATE • COUNTY

ALAMEDA

The California State Department of Public Health at Berkeley has received a grant of $53,026 from the U. S. Public Health Service for setting up a **county cancer registry.** The grant is one of nine totalling $321,894 made by the Public Health Service in a program seeking to shorten the interval between discoveries in cancer research and the application of the benefits of the findings at the community level.

LOS ANGELES

Dr. J. Vernon Luck, Los Angeles, was elected president of the American Academy of Orthopaedic Surgeons at the recent annual meeting of the organization in Chicago.

* * *

The School of Medicine of the University of Southern California recently was awarded a grant of $120,000 by the Southern California chapter of the Arthritis and Rheumatism Foundation to be used for **expansion of medical training and research in rheumatic diseases.** In a statement acknowledging receipt of the grant, Dr. Clayton Loosli, dean, and Dr. Thomas Brem, head of the department of medicine, said that the money was to be used for a new department of rheumatology.

MENDOCINO

Announcement of the appointment of **Dr. Ernest W. Klatte** as superintendent of Mendocino State Hospital has been made by Dr. Daniel Blain, director of the California State Department of Mental Hygiene. Dr. Klatte had been associate superintendent.

SAN DIEGO

Dr. Bertram E. Marks, who resigned a year ago, has returned to the San Diego Department of Public Health as chief of the Bureau of Acute Communicable Disease Control to take the place of **Dr. Leon L. Gardner,** who recently resigned because of ill health.

Dr. Sidney B. Clark, assistant director of the department, resigned to become chief of preventive medicine for the United States Government in the Panama Canal Zone.

SAN FRANCISCO

A grant of $90,000 spread over a five-year period has been awarded by the National Institutes of Health to support **studies on the role of stress in heart disease** that are being carried out by Dr. Meyer Friedman and associates at the Harold Brunn Institute for Cardiovascular Research.

SANTA CLARA

Announcement of three new **appointments to the faculty of Stanford University School of Medicine,** effective July 1, was made recently by Wallace Sterling, president of the University. They are:

Dr. William K. Hamilton, now chairman of the division of anesthesiology at the College of Medicine, State University of Iowa, as professor of surgery (anesthesiology).

Dr. C. Howard Hatcher, now head of the division of orthopedic surgery at the University of Chicago, as professor of surgery (orthopedic).

Dr. Harry A. Oberhelman, Jr., now associate professor of surgery and secretary to the department at the University of Chicago, as associate professor of surgery.

GENERAL

Dr. Francis E. West of San Diego, a past president of the California Medical Association, and **Dr. James V. McNulty** of Los Angeles have been appointed to the California State Board of Medical Examiners by Governor Edmund G. Brown. They replace Dr. Daniel W. Sooy of Laguna Beach and Dr. Frederic N. Tryoler of Los Angeles, whose terms expired.

* * *

The National Health Education Committee has announced the availability of a pamphlet titled **A Statement on Arteriosclerosis,** written by a group of eight experts on the subject, for distribution by physicians to patients. The Committee said the statement was prepared as a simple guide to "give the average man and woman something he or she could do in cooperation with the physician to minimize the hazards of arteriosclerosis."

The following physicians are the authors: Louis N. Katz, Samuel L. Levine, Irvine H. Page, Howard B. Sprague, Jeremiah Stamler, Frederick J. Stare, Paul Dudley White and Irving S. Wright.

Copies are available from Miss Jane E. McDonough, executive secretary of the committee, 135 East 42nd Street, New York 17, N. Y.

* * *

The California Medical Assistants' Association has announced that the last of its educational symposia for the current year will be held in Sacramento, March 27, at the El Dorado Hotel on Highway 40 east. Richard C. Ripple, M.D., President of the Sacramento Society for Medical Improvement, will make the welcome speech. Further information may be obtained from Katherine Enns, P. O. Box 312, Davis, California.

The C.M.A.A. annual convention will be held at the Hotel Claremont in Berkeley April 22 and 23, at which time a new schedule of symposia will be worked out, one to be held each month of the following year. Information about the convention may be obtained from Anne Reece, president, 1837 South Indiana Street, Porterville.

SEE BRIEF NOTES
on
C.M.A. Annual Session Highlights
Page 233

POSTGRADUATE EDUCATION NOTICES

THIS BULLETIN of the dates of postgraduate education programs and the meetings of various medical organizations in California is supplied by the Committee on Postgraduate Activities of the California Medical Association. In order that they may be listed here, please send communications relating to your future medical or surgical programs to: Mrs. Margaret H. Griffith, Director, Postgraduate Activities, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5.

UNIVERSITY OF CALIFORNIA AT LOS ANGELES

Clinical Traineeships — Anesthesia, Dermatology and Pediatric Cardiology. Dates by arrangement. Minimum period—two weeks. Fee: Two weeks, $150.00; four weeks, $250.00.

Geriatrics in Clinical Practice. Saturday and Sunday, March 19 and 20. Twelve hours. Fee: $40.00 (includes Sunday lunch).

Emotional Problems in Pediatric Practice. Friday through Sunday, April 8 through 10. University of California Residential Conference Center, Lake Arrowhead. Thirteen hours. Fee: $110.00 (including room and meals).

Postgraduate Medical Symposium. Grossmount Hospital, La Mesa. Saturday and Sunday, April 30 and May 1. Twelve hours. Fee: $25.00.

Management of Medical Emergencies. Friday and Saturday, May 6 and 7. Twelve hours.*

SURGICAL ANATOMY. Friday through Monday, June 24 through 27.

Head and Neck. Friday, June 24. Fee: $40.00.†

Thorax, Abdomen and Pelvis. Saturday and Sunday, June 25 and 26. Fee: $80.00.†

Extremities. Monday, June 27. Fee: $40.00.†

General Pediatrics. Sunday through Wednesday, July 17 through 20. Lake Arrowhead, University of California Residential Conference Center. Sixteen hours. Fee: $137.50 (including room and meals).

Advance Seminar in Internal Medicine. Wednesday through Sunday, July 20 through 24. University of California Residential Conference Center, Lake Arrowhead. Eighteen hours. Fee: $150.00 (including room and meals).

Dermatology in Office Practice. Monday and Tuesday, July 25 and 26. Twelve hours.*

Seminars in Dermatology (for Dermatologists). Wednesday through Saturday, July 27 through 31. University of California Residential Conference Center, Lake Arrowhead. Fourteen and one-half hours. Fee: $150.00 (including room and meals).

Anesthesia for Special Procedures. Wednesday, Thursday and Friday, August 3, 4 and 5. Eighteen hours.*

Arthritis and Rheumatism. Friday and Saturday, August 19 and 20. Twelve hours.*

Obstetrical Procedures and Complications. Thursday and Friday, August 26 and 27. Twelve hours.*

*Fees to be announced.
†Hours to be announced.

For Ancillary Personnel

Fifth Regional Conference for Nurses. Sunday through Wednesday, June 12 through 15. Thirty-two hours. Fee: $80.00.

The College Nurse: New Concepts in Her Profession. Friday and Saturday, June 17 and 18. Twelve hours. Fee: $20.00.

9th Annual Symposium in Clinical Laboratory Technology. Saturday and Sunday, June 18 and 19. Sixteen hours.*

Workshops for School Nurses:

Riverside, Tuesday through Saturday, June 21 through 25. Forty-five hours. Fee: $40.00.

Los Angeles, Tuesday through Saturday, July 5 through 9. Forty-five hours. Fee: $40.00.

San Diego, Wednesday through Sunday, July 13 through 17. Forty-five hours. Fee: $40.00.

Contact: Thomas H. Sternberg, M.D., assistant dean for Continuing Medical Education, U.C.L.A. Medical Center, Los Angeles 24. BRadshaw 2-8911, Ext. 7114.

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Medical Evening Series (Eden Hospital, Castro Valley). Tuesdays, March 22 to May 10. Sixteen hours. Fee: $35.00.

Physiological Basis for Diagnosis and Treatment. An Official Course of the American Physiological Society. Wednesday through Sunday, March 30 through April 3. Thirty-five hours. Fee: $90.00 or $25.00 per day.

Course on Amblyopia. Monday through Wednesday, April 11 through 13. Twenty-one hours.*

Neuropsychiatry in General Practice (Napa State Hospital). Thursday evenings, April 21 through May 26. Fee: $5.00.

Symposium on Pediatric Surgery (Children's Hospital). Saturday, April 23. Seven hours. Fee: $12.50.

A Course on General Surgery. Monday to Friday, April 25 to 29. Thirty-five hours. Fee: $100.00.

A Course on Urology. Thursday and Friday, May 5 and 6. Fourteen hours.*

A Course on Ear, Nose, Throat. Thursday to Saturday, May 12 to 14. Twenty-one hours.*

Proctology. Thursday and Friday, May 19 and 20. Fourteen hours. Fee: $40.00.

Advances in Surgical Anatomy, Normal Anatomy and Histology of the Eye. Thursday to Saturday, June 2 to 4. Twenty-one hours.*

A Course on the Foot. Thursday to Saturday, June 9 to 11. Twenty-one hours.*

A Course in Industrial Medicine. Wednesday to Friday, June 22 to 24. Twenty-one hours.*

A Course on New Drugs. Thursday to Saturday, July 14 to 16. Twenty-one hours.*

Obstetrics and Gynecology. Thursday to Saturday, September 15 to 17. Twenty-one hours.*

Fundamental Practices of Radioactivity and the Diagnostic and Therapeutic Uses of Radioisotopes. Two or three month course limited to one enrollee per month. Fee: $350.00.

For Ancillary Personnel

Rehabilitation Nursing. Monday through Friday, April 11 through 29. Fairmont Hospital, San Leandro.*

Evening Lectures on Pharmacy. Mondays, April 18 to May 23.*

Nursing Care of Mothers and Children. Tuesdays, April 19 through June 7, Highland Hospital, Oakland. Sixteen hours. Fee: $25.00.

Nursing Care of Medical-Surgical Patients. Thursdays, April 21 through June 9. Highland Hospital, Oakland. Sixteen hours. Fee: $25.00.

Nursing and People. Monday to Friday, May 2 to 13.*

Understanding the Adolescent for Nursing Care. Monday through Wednesday, May 9 through 11.*

Human Relations in the Modern Hospital. Monday through Friday, June 13 through 17.*

Integration of Psychiatric Principles in the Total Curriculum. Tuesday to Friday, July 5 to August 12.*

Administration of Nursing Care. Tuesdays, September 13 through December 13.*

Contact: Seymour M. Farber, M.D., assistant dean, Department of Continuing Medical Education, University of California Medical Center, San Francisco 22. MOntrose 4-3600, Ext. 665.

STANFORD UNIVERSITY SCHOOL OF MEDICINE, PALO ALTO

Emotional and Social Aspects of Child Health in Pediatric Practice. June 13 through 24. *Contact:* Hale F. Shirley, M.D., Professor of Pediatrics and Psychiatry, Stanford Medical Center, 300 Pasteur Drive, Palo Alto, Calif.

STANFORD HOSPITAL, SAN FRANCISCO

Eye Conference. Each Monday morning.

Didactic Course in Ophthalmology. Monday and Wednesday, 7 to 8:30 p.m.

What's New in Gastroenterology. Saturday, March 26, 9 a.m. to 5 p.m.

Office Gynecology. Saturday, April 9, 9 a.m. to 5 p.m.

Course on Keratoplasty for Specialists in Ophthalmology. Wednesday through Friday, May 18 through 20.

Postgraduate Conference in Strabismus. Wednesday through Friday, July 13 through 15.

Contact: Arthur Selzer, M.D., program committee chairman, San Francisco-Stanford Hospital, Clay and Webster Sts., San Francisco 15.

UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES

Cardiac Resuscitation. Sponsored by the Los Angeles County Heart Association each Wednesday throughout the year, 4 to 6 p.m. USC Medical Research Building, Room 211, 2025 Zonal Avenue. Residents and interns of Los Angeles County, and all armed forces medical personnel admitted without fee. Tuition for all other physicians: $30.00. (Each session all-inclusive.)

Basic Home Course in Electrocardiography. One year postgraduate series, electrocardiogram interpretation by mail. Physicians may register at any time and receive all 52 issues. Fifty-two weeks. Fee: $100.00.

Advance Home Course in Electrocardiography. One year postgraduate series, electrocardiogram interpretation by mail. Fifty-two issues: $85.00. Physicians may register at any time.

Dermatology Clinic, One-Day Symposium. Thursday, March 24. Seven hours. Fee: $25.00.

Symposium on Hypertension. Friday, April 1. Seven hours. Fee: $10.00.

Funduscopy in Internal Medicine. Every other Tuesday, April 5 through June 14. Twelve hours. Fee: $37.50.

Ward Walks in Rare Diseases. Thursdays, April 14 through June 16. Twenty hours. Fee: $100.00.

Hawaii Course: The USC School of Medicine will offer the Third Postgraduate Refresher Course to be held in Honolulu and on board the S.S. *Lurline* from August 4 to August 20, 1960. (As a time and money saver, round trip air travel is also possible August 4 to August 14.)

Contact: Phil R. Manning, M.D., associate dean and director, Postgraduate Division, University of Southern California School of Medicine, 2025 Zonal Avenue, Los Angeles 33. CApital 5-1511.

COLLEGE OF MEDICAL EVANGELISTS

CLINICAL TRAINEESHIPS available in all clinical departments by arrangement with the Postgraduate Division and the chairman of the department or departments involved. Eighty hours minimum. Fee: As arranged.

Diseases of the Chest: Two and four-week Traineeships in cooperation with the Los Angeles County Hospital. Dates as arranged.

Anesthesia. Monday through Friday. Dates as arranged. Six months. Fee: $350.

SPECIAL SKILLS available in the clinical departments, usually with a maximum of two or three students.

Surgical Anatomy: Head and Neck, April 20 through June 1, 63 hours. Fee: $75.00.

Surgical Anatomy: Head and Neck, April 20 through June 1. Twenty-four hours. Fee: $35.00.

TROPICAL PUBLIC HEALTH: Causes, treatment and management of diseases found in the warm climates. For physicians who plan to serve abroad and other ancillary personnel. Monday through Friday, April 1 through May 30. Fee: $65.

JOINT MANIPULATION. Monday through Friday, 8:00 to 12:00, dates to be arranged. Twenty hours. Fee: $75.00.

For information contact: G. E. Norwood, M.D., assistant dean and chairman, Division of Postgraduate Medicine, College of Medical Evangelists, 1720 Brooklyn Ave., Los Angeles 33. ANgelus 9-7241, Ext. 214.

*Fees to be announced.

CALIFORNIA MEDICAL ASSOCIATION POSTGRADUATE COURSES

POSTGRADUATE INSTITUTES—1960
(Tenth Anniversary Year)

North Coast Counties in cooperation with College of Medical Evangelists, March 31 and April 1. Flamingo Hotel, Santa Rosa. *Chairman:* H. Ward Wick, M.D., 858 Fourth Street, Santa Rosa.

Southern Counties in cooperation with Stanford University School of Medicine, April 21 and 22. Palm Springs Riviera. *Chairman:* Robert M. Zweig, M.D., 7004 Magnolia, Riverside.

San Joaquin Valley Counties in cooperation with University of Southern California School of Medicine, April 28 and 29. Ahwahnee Hotel, Yosemite. *Chairman:* Campbell H. Covington, M.D., 2057 High Street, Selma.

Sacramento Valley Counties in cooperation with UCLA School of Medicine, July 1 and 2. Tahoe Tavern, Lake Tahoe. *Chairman:* Herbert W. Korngold, M.D., 1217 30th Street, Sacramento.

Contact: One of the chairmen listed above, or Postgraduate Activities Office, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5.

* * *

AUDIO-DIGEST FOUNDATION, a nonprofit subsidiary of the C.M.A., offers (on a subscription basis) a series of six different hour-long tape recordings covering general practice, surgery, internal medicine, obstetrics and gynecology, pediatrics and anesthesiology. Designed to keep physicians posted on what is new and important in their respective fields, these programs survey current national and international literature of interest and contain selected highlights of on-the-spot recordings of national scientific meetings, panel discussions, symposia, and individual lectures. For information contact Mr. Claron L. Oakley, Editor, 1919 Wilshire Blvd., Los Angeles 57, HUbbard 3-3451.

Medical Dates Bulletin

MARCH MEETINGS

PIONEERS MEMORIAL HOSPITAL MEDICAL STAFF in association with the University of Oklahoma School of Medicine, Tenth Annual Postgraduate Assembly. March 18 and 19. Pioneers Memorial Hospital, Brawley. *Contact:* George C. Holleran, M.D., program chairman, P. O. Box 159, Brawley, Calif.

ALAMEDA COUNTY TUBERCULOSIS, HEART AND CANCER ASSOCIATIONS, "A Practical Approach to Current Clinical Problems." March 23, 1:30 to 5:30. Highland Hospital Auditorium, Oakland. *Contact:* Joseph Ross, M.D., committee chairman, 1916 Franklin St., Oakland.

STANFORD UNIVERSITY SCHOOL OF MEDICINE, Santa Clara County Heart Association and San Mateo County Heart Association Fourth Annual Symposium on Cardiovascular Disease. March 24. 8:30 a.m. to 5 p.m. Physics Lecture Hall, Lomita Drive, Stanford University. *Contact:* Mr. John Blum, San Mateo County Heart Association, 181 Second Avenue, San Mateo, or Mrs. Mabel Weyland, Santa Clara County Heart Association, 461 Porter Building, San Jose.

SAINT JOSEPH HOSPITAL, BURBANK, Annual Medical Assembly. March 25 and 26, 9 to 5 p.m. Saint Joseph Hospital Auditorium, 501 S. Buena Vista, Burbank. *Contact:* R. Straus, M.D., program chairman, St. Joseph Hospital, 501 S. Buena Vista, Burbank, THornwall 8-5531, Ext. 305.

AMERICAN SOCIETY OF MAXILLOFACIAL SURGEONS, Ambassador Hotel, Los Angeles. March 27 to 31. *Contact:* Arthur E. Smith, M.D., chairman and local arrangements committee, 1930 Wilshire Blvd., Los Angeles 57.

INTERMOUNTAIN PEDIATRIC SOCIETY, Stardust Hotel, Las Vegas, Nevada. March 28 and 29. *Contact:* Joseph R. Newton, M.D., publicity chairman, 2000 S. 9th East, Salt Lake City, Utah.

SOUTHWESTERN SURGICAL CONGRESS. March 28 through 31, Riviera Hotel, Las Vegas, Nevada. *Contact:* Miss Mary O'Leary, executive secretary, 1213 Medical Arts Building, Oklahoma City, Oklahoma.

NEUROSURGICAL SOCIETY OF AMERICA. March 30 through April 2, Del Monte Lodge, Del Monte. *Contact:* Raymond K. Thompson, M.D., secretary, 803 Cathedral Street, Baltimore 1.

APRIL MEETINGS

AMERICAN SOCIETY OF INTERNAL MEDICINE. April 1 through 3. Palace Hotel, San Francisco. *Contact:* Mr. Robert L. Richards, executive director, 350 Post Street, San Francisco 8.

AMERICAN COLLEGE OF PHYSICIANS Annual Meeting, April 4 through 9. Civic Auditorium, San Francisco. *Contact:* Edward C. Rosenow, Jr., M.D., executive director, 4200 Pine Street, Philadelphia 4.

SEVENTH ANNUAL FORT MILEY MEDICAL CLINICS AND SYMPOSIA, sponsored by San Francisco Academy of General Practice in cooperation with faculties of Stanford and U. C. Schools of Medicine. Tuesday nights, April 12 through May 17, 8 p.m., Ft. Miley Veterans Administration Hospital, 42nd Avenue and Clement Street, San Francisco. Registration fee: Members $15, nonmembers $20. *Contact:* Robert A. Major, M.D., chairman, 2299 19th Avenue, San Francisco 16.

HARVEY CUSHING SOCIETY. Fairmont Hotel, San Francisco. April 13 through 17. *Contact:* Edmund J. Morrissey, M.D., 450 Sutter Street, San Francisco 8.

CALIFORNIA MEDICAL ASSISTANTS ASSOCIATION Annual Convention. April 23 and 24. Claremont Hotel, Berkeley. *Contact:* Mrs. Anne Reece, president CMAA, 1837 So. Indiana St., Porterville, California.

VALLEY CHILDREN'S HOSPITAL Spring Clinics. April 28 to 30. Roosevelt High School Auditorium, Fresno. *Contact:* Valley Children's Hospital, Shields and Millbrook Avenues, Fresno.

TB AND HEALTH ASSOCIATION, Los Angeles County Workshop on Techniques of Teaching Chest Disease. Jonathan Club, Los Angeles. April 30, 8:30 a.m. to 5 p.m. *Contact:* Mr. Richard Gaines, staff coordinator, 1670 Beverly Blvd., Los Angeles 26.

MAY MEETINGS

Pan American Medical Association Congress. May 2 to 11. Mexico City. *Contact:* Joseph J. Eller, M.D., director general, 745 Fifth Avenue, New York, N. Y.

Los Angeles County Heart Association Annual Meeting. Biltmore Bowl, Los Angeles—Luncheon, 12:00 noon. Wednesday, May 4. *Contact:* Chauncey A. Alexander, executive director, 2405 West 8th St., Los Angeles 57.

Memorial Hospital of Long Beach Medical Staff 2nd Annual Scientific Symposium "New Horizons in Medicine," to be held in conjunction with the formal opening of the new 400-bed Memorial Hospital of Long Beach. May 4. *Contact:* George X. Trimble, M.D., director of medical education, Seaside Memorial Hospital, 1401 Chestnut Avenue, Long Beach 13.

Student American Medical Association, Statler-Hilton Hotel, Los Angeles, May 5 through 8. *Contact:* Mr. R. F. Staudacher, executive director, 430 N. Michigan, Chicago 11.

Nevada Academy of General Practice 1960 Annual Assembly. May 12 through 14. Riverside Hotel, Reno, Nevada. Scientific program by University of California School of Medicine. *Contact:* Roy M. Peters, M.D., general chairman, 475 So. Arlington, Reno, Nevada.

Hawaii Medical Association Annual Meeting. May 12 through 15. *Contact:* Miss Lee McCaslin, executive secretary, 510 S. Beretania, Honolulu 13.

National Tuberculosis Association—American Trudeau Society Annual Meeting. May 16 through 19. Statler Hilton and Biltmore Hotels, Los Angeles. *Contact:* Mr. Sherman Asche, general chairman, Annual Meeting Committee, P. O. Box 4037, Santa Barbara.

American College of Nutrition 1960 Annual Convention. May 20 through 22. Huntington Sheraton Hotel, Pasadena. *Contact:* Donald B. Haynie, executive secretary, 10651 West Pico Blvd., Los Angeles 64.

California Heart Association Annual Meeting and Scientific Session. May 20 through 22. Claremont Hotel, Berkeley. *Contact:* J. Keith Thwaites, executive director, 1428 Bush Street, San Francisco 9.

Long Beach Surgical Society Annual "Clinic Day." May 21. Lafayette Hotel, Long Beach. 2 p.m. to 9 p.m. *Contact:* Harriman Jones, M.D., secretary-treasurer, 211 Cherry Ave., Long Beach 2.

SUMMER AND FALL MEETINGS

Gerontological Society, Inc., Mark Hopkins Hotel, San Francisco. August 7 through 12. *Contact:* Mrs. Marjorie Adler, administrative secretary, 660 S. Kingshighway Blvd., St. Louis 10.

Reno Surgical Society 10th Annual Conference. August 18, 19 and 20. The Mapes Hotel, Reno. *Contact:* Harry B. Gilbert, M.D., 275 Hill Street, Reno, Nevada.

American Association of Blood Banks, Jack Tar Hotel, San Francisco. August 21 through 26. *Contact:* John B. Alsever, M.D., secretary, 1211 W. Washington St., Phoenix, Arizona.

American Hospital Association, Civic Auditorium, San Francisco. August 27 through September 1. *Contact:* Mr. Maurice J. Norby, assistant director, 18 E. Division St., Chicago.

Pacific Dermatologic Association Inc. 12th Annual Meeting. Empress Hotel, Victoria, British Columbia. September 2 through 4. *Contact:* Edward Ringrose, M.D., secretary, 2636 Telegraph Ave., Berkeley.

Nevada State Medical Association Annual Meeting. September 7 through 10. Stardust Hotel, Las Vegas. *Contact:* Nelson B. Neff, executive secretary, P. O. Box 2790, Reno, Nevada.

Postgraduate Assembly of Saint John's Hospital. September 8 through 10. 9 a.m. to 4 p.m., St. John's Hospital, Santa Monica. *Contact:* John C. Eagan, M.D., director, 1328 22nd St., Santa Monica.

California Society of Internal Medicine Annual Meeting, Yosemite. September 23, 24 and 25. *Contact:* Barbara E. Oulton, executive secretary, 350 Post St., San Francisco 8.

Pan-Pacific Surgical Association 8th Intensive Surgical Congress, embracing all Surgical Specialties. September 28 through October 5. Honolulu, Hawaii. *Contact:* F. J. Pinkerton, M.D., director general, Suite 230, Alexander Young Building, Honolulu 13.

American Association for the Surgery of Trauma. Coronado Hotel, San Diego. October 5 through 7. *Contact:* William T. Fitts, Jr., M.D., secretary, 3400 Spruce St., Philadelphia 4.

San Francisco Heart Association 30th Annual Postgraduate Symposium on Heart Disease. October 5 through 7. St. Francis Hotel, San Francisco. *Contact:* Mr. Lawrence I. Kramer, Jr., executive director, 259 Geary St., San Francisco 2.

Western Industrial Medical Association combined Meeting with 4th Western Industrial Health Conference. October 7 through 9. Jack Tar Hotel, San Francisco. *Contact:* Verne G. Ghormley, M.D., president, 3032 Tulare Street, Fresno 21.

American College of Surgeons, 46th Annual Clinical Congress, San Francisco. October 10 to 14. *Contact:* William E. Adams, M.D., secretary, 40 E. Erie St., Chicago 11.

Kaiser Foundation Hospitals in Northern California Fourth Annual Symposium on Human Genetics. October 14 and 15. Fairmont Hotel, San Francisco. *Contact:* Martin A. Shearn, M.D., Director of Medical Education, 280 West MacArthur Blvd., Oakland.

California Academy of General Practice 11th Annual Scientific Assembly. October 16 through 19. Masonic Memorial Temple, San Francisco. *Contact:* William W. Rogers, executive secretary, 461 Market St., San Francisco 5.

Western Orthopedic Association Annual Convention. October 22 through 27. Hotel Del Coronado, Coronado. *Contact:* Mrs. Vi Mathieson, executive secretary, 354 21st St., Oakland 12.

St. Jude Hospital—Fullerton 2nd Annual Postgraduate Assembly. October 27 and 28. St. Jude Hospital. *Contact:* B. L. Tesman, M.D., chairman, St. Jude Hospital, Fullerton.

American School Health Association, San Francisco. October 30 through November 4. *Contact:* A. O. DeWeese, M.D., executive secretary, 515 E. Main St., Kent, Ohio.

American Public Health Association, San Francisco. October 31 through November 4. *Contact:* Berwyn F. Mattison, M.D., executive director, 1790 Broadway, New York 19.



THE PHYSICIAN'S *Bookshelf*

JEWISH MEDICAL ETHICS—A Comparative and Historical Study of the Jewish Religious Attitude to Medicine and Its Practice—Rabbi Dr. Immanuel Jakobovits. Philosophical Library, Inc., 15 East 40th Street, New York, N. Y., 1959. 381 pages, $6.00.

The author, a very talented rabbi, has done considerable, painstaking research in preparing this volume. Religion and medicine have been in alliance with each other throughout the entire course of recorded human history. This partnership of religion and medicine has not always been holy or healthy. The fields of medical ethics covered by Jewish law are wider and more numerous than the comparative material provided by the Christian and Moslem faiths. All faiths are concerned with the art of healing, the recourse to prayer and the moral responsibilities of the physician. The attitude to medicine, human healing versus Divine Providence, is discussed carefully.

Definition of dangerous diseases and concessions and restrictions for the patients are enumerated. Ethical concessions for the sick and moral considerations in the saving of human life are emphasized. Holy Writ tells us "that man is obliged to fulfill his duties toward his neighbor in the same way as he must discharge his debt to Heaven." In contrast to the jurisprudence of the Romans, Jewish law does not know of any division between legal law and moral law in its principles or administration.

A chapter discussing the dead and their treatment is described. The Talmud directs the performing of a cesarean section on a woman who died during childbirth in the hope of delivering a viable child. The Talmud does not make any references to the treatment of infectiously diseased corpses and their disposal. The first frank reference to a post mortem examination dates back to 1286, as far as the Church is concerned. On the other hand the Talmud shows "serious discussion on scientific method and the planning of an experiment in dissection of a human body." The Mishnah details the list of human bones very accurately and this could only have been obtained through a post mortem examination.

The attitude to pain in human beings and in animals is given considerable consideration. In the Jewish faith compassion both for human beings and animals is stressed. The vast subjects of Euthanasia, dissection, abortion, artificial insemination, sterilization, and therapeutic contraception are all treated in the light of eternal truth, whose authentic source is the Bible.

Prophylactic hygiene, circumcision, sexual hygiene and sexual relations and their effect on eugenics are all carefully described.

The laws dealing with the Sabbath, forbidden foods, laws of ritual slaughter, preparation of the meat and rules for all meals are analyzed.

Churchmen in all ages including the present, recoil from the idea of defeating Providence or thwarting the divine vengeance for sin. This outlook caused ecclesiastical condemnation of the pioneering efforts in plastic surgery in the sixteenth century; it induced Pope Leo XII to ban the use of condoms against syphilis in 1836; there was opposition to Simpson's use of chloroform to ease pains of childbirth and everyone was concerned and disturbed by Ehrlich's discovery of salvarsan for the treatment of syphilis. The author brings all these points out very vividly with the necessary biography and references to substantiate each point in question. Discussion is brought out on faith cures, and the acts of healing wrought by Jesus and in the Apostolic age.

The evolution of medicine from a primitive fight against evil spirits, demons, witches and astrological omens into a rational science was a long and tedious process. Neither Egypt nor Greece, the two homes of rational medicine, had any influence on the scientific outlook of the Talmud. The Talmud retained the biblical hostility to superstition.

This book is written in a very interesting and stimulating manner. Good health today depends on far more than medical progress. I would indeed recommend this volume to be read not only by the medical profession but by laity as well.

ABRAHAM BERNSTEIN, M.D.

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THE MEGALOBLASTIC ANEMIAS—Modern Medical Monographs 18—Victor Herbert, M.D., Research Assistant in Hematology, The Mount Sinai Hospital, New York. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, N. Y., 1959. 162 pages, $6.00.

In this very readable little volume, the author reviews the literature and his experience with some 200 cases of megaloblastic anemia. The material is presented in terms of hematologic morphology, the clinical picture, differential diagnosis, therapy and particularly, etiologic classification on the basis of vitamin B_{12} and/or folic acid deficiency.

He stresses the importance of ovalmacrocytes and the "right shift" in polymorphonuclear leukocyte lobulation as an early finding. While detection of macrocytosis in the peripheral blood or giant metamyelocytes or megaloblasts in the marrow early may be a problem, even for the hematologist, an increase in four and five lobed PMN's and the presence of six lobed PMN's should be picked up by most technicians. In the absence of folic acid administration, he noted no neuropathy of B_{12} deficiency without a "right shift" or macroovalocytes.

In regard to the treatment of pernicious anemia, admitting that up to 98 per cent of 1,000 microgram doses of B_{12} are excreted in the urine, he presents little evidence to support his recommendation of these 1,000 microgram injections of B_{12} for initial and maintenance therapy.

The photomicrographs are poor but no worse than any other attempt to picture a megaloblastic marrow. Typographical errors are lacking, but one wonders about "Asiatic Type" spinal cord change (page 71). The material is clearly, critically and concisely presented. Subject matter is arranged for easy reference, and the index is good. The bibliography is extensive, over 600 references, and up to date (1959). It is highly recommended.

PHYSIOLOGY OF THE EYE—Clinical Application—Third Edition. Francis Heed Adler, M.A., M.D., F.A.C.S., William F. Norris and George E. de Schweinitz, Professor of Ophthalmology, University of Pennsylvania School of Medicine; Consulting Surgeon, Wills Hospital, Philadelphia. The C. V. Mosby Company, St. Louis, Mo., 1959. 790 pages, $16.00.

Adler's Physiology of the Eye was published in 1950, and since its first edition, has become the outstanding book on this field of ophthalmology. It has been stated that if a candidate for the American Board of Ophthalmology Examinations were to be limited to one volume for his preparation, it should be this book.

In the preface to the first edition Adler stated that if the ophthalmologist is to treat the diseases of the eye adequately, he must know how the various portions of the eye normally function. For example, in the treatment of glaucoma, it is necessary to understand the formation and elimination of the aqueous humor, the permeability characteristics of the cornea and the hydrodynamics of the ocular circulation. In his first edition he took the recent findings of the physiology of the eye as found in the experimental laboratory and applied these facts clinically. This general plan was used throughout the book and accounts for its immediate acceptance in this field. The second edition was published in 1953.

The research in the field of physiology has been tremendous since the second edition of the book was published. In this, the third edition, Adler has made a very careful evaluation of the work done since that time. This has meant extensive revision of some portions of the book, as, for example, the chapters on aqueous humor and intraocular pressure. The chapter on ocular muscles has been entirely rewritten. This chapter also contains eight pages on the electromyography of the ocular muscles. All the recent advances in physiology of the eye as based on both laboratory findings and clinical observation have been incorporated in this new edition.

The book contains 56 more pages than the previous edition and has 43 more illustrations and is beautifully and instructively illustrated. There are excellent key references at the end of each chapter. The format, paper and illustrations leave nothing to be desired. There is an excellent 10-page index.

This newly revised and partly rewritten edition is a must for every ophthalmologist who is attempting to keep abreast with the rapidly changing concepts of the physiology of the eye. These changes are important factors in the better clinical care of the diseases of the eye.

FREDERICK C. CORDES, M.D.

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CLINICAL AUSCULTATION OF THE HEART—Second Edition—Samuel A. Levine, M.D., Sc.D. (Hon.), F.A.C.P., Clinical Professor of Medicine, Emeritus Harvard Medical School; Consultant in Cardiology, Peter Bent Brigham Hospital, Boston; Consultant Cardiologist, Newton-Wellesley Hospital; Physician, New England Baptist Hospital; and W. Proctor Harvey, M.D., Associate Professor of Medicine, Georgetown University School of Medicine and Director, Division of Cardiology, Georgetown University Hospital; Consultant in Cardiology, Walter Reed Army Medical Center, Bethesda Naval Hospital. W. B. Saunders Company, Philadelphia, 1959. 657 pages, 660 illustrations. $11.00.

One is first impressed with the size of this volume. There are 657 pages and it is more than twice the size of the first edition published ten years ago. All of this is an indication that the old art of auscultation has advanced along with newer and more complicated methods for the study of heart diseases. Much of its growth is due to new material about congenital heart disease but there is also much new material in all fields.

The authors have followed the plan and purpose of the first edition. It is, as the title states, a book concerned with clinical auscultation of the heart, not a book about phonocardiography. Auscultatory findings are described and illustrated with phonocardiograms. With the description there is also an account of measures which help in eliciting certain physicial findings. These descriptions, which must for the most part come from the lifetime experience of the senior author, and especially from his interest in physical examination of the heart, are one of the valuable features of the text. The reader, if he has not previously done so, will find phonocardiograms easy to interpret as illustrations of sounds and murmurs, and ideally suited for this purpose.

The volume is well arranged with chapters on the heart sounds, arrhythmias and cardiac murmurs. There is a final chapter on miscellaneous auscultatory findings which includes topics which do not fit into the previous chapters, as well as some examples of bizarre sounds and murmurs. The index, with a few trials, seemed awkward to use, but there is a simple, well arranged table of contents which will almost always lead one at once to the desired subject.

No grounds were discovered for serious criticism of any part of the book. Everything of importance in the field of auscultation seems to have been included. Perhaps the reader would benefit from a more critical discussion of the origin of the heart sounds. Most of the illustrations are excellent but a few have been reduced in size in the process of reproduction to the point where they are almost unreadable. One might also wish to read more about the phonocardiograph and its uses. Probably its most valuable use is the use the authors have made of it, but phonocardiography has come of age, and there are some situations where it can give more important information than more complicated methods of diagnostic study. One also hopes that the authors in planning for the next edition will consider extending the scope of the book to include illustrations of the other simple methods of cardiac examination, inspection and palpation, with graphic records of the venous pulse and movements of the precordium.

Everyone interested in examinations of the heart will find something useful in this book. The medical student, once he has made a beginning in the art of auscultation, will profit by referring to it for additional information on specific topics, and the accomplished cardiologist is quite certain to discover new information.

JOHN K. LEWIS, M.D.

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ANESTHESIA FOR INFANTS AND CHILDREN—Robert M. Smith, M.D., Anesthesiologist, The Children's Medical Center, Boston, Mass.; Assistant Clinical Professor of Anesthesia, Harvard Medical School; Consultant in Anesthesia, U. S. Naval Hospital, Chelsea, Mass., and Lemuel Shattuck Hospital, Jamaica Plain, Mass. Foreword by Robert E. Gross, M.D. The C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Mo., 1959. 418 pages, with 182 illustrations, $12.00.

This is an excellent, conservative treatise which covers the field of pediatric anesthesia in a concise lucid manner.

Essential physiology and pathological processes with the differences between infants and adults are clearly and logically described. Equipment and choice of anesthetic agents and methods are presented in detail for the entire field of pediatric anesthesia as are preoperative preparation, fluid therapy and blood replacement.

The entire book is well organized and can be recommended to all interested in the surgical care of infants and children. It should be required reading for all residents in anesthesiology and of value to all anesthesiologists not specializing in pediatric anesthesia.

CHARLES F. MCCUSKEY, M.D.

PSYCHOPATHY—A Comparative Analysis of Clinical Pictures—Carl Frankenstein, Ph.D., Associate Professor of Special Education, The Hebrew University, Jerusalem. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, New York, 1959. 198 pages, $6.75.

This book deals with a complex and controversial category of human behavioral disturbance which the author designates "psychopathy" but which has been called by other names also. Dr. Frankenstein defines psychopathy as "constitutional inability to establish objective (positive as well as negative) relationships and effective human ties or as a constitutional deficiency in volition and emotion (in contradistinction to intellectual deficiencies)." He further describes it as demonstrating "lack of identification; a poorly defined ego concept; a tendency to mirror others in behavior; absence of superego awareness, of anxiety, of guilt feelings and of neurotic reactions to conflict or frustration; shallowness of fantasy material; lack of concern for objective facts; weakness of the time concept; . . . moral indolence, often leading to brutal crime; lack of control over sexual and/or material desires; hysterical fanaticism, seemingly for the sake of a truth, a principle, an idea, but actually reflecting an insatiable need to be the center of attention, admiration or fear; the same need producing the well known swindler and imposter type . . .; narcissistic excitability; or almost unlimited seducibility."

The book treats this area of disturbance primarily from a descriptive and phenomenological basis, but with some discussion of dynamics of the personalities involved; the only reference to treatment is the opinion that treatment is impossible because of the constitutional quality of the disturbance. Psychopathy is described and discussed more from the frame of reference of Jungian psychological theory than from that of any other particular school. After the preliminary discussion and classification of types of psychopathy, the great bulk of the book is taken up with a comparison of the author's concept of psychopathic disturbance with other kinds of psychological disturbance of a similar kind, as well as with disturbances of a grossly dissimilar nature.

The first line in the preface to the book is, "This book is a study in clinical semantics." The balance of the book bears out this warning. Physicians, and most psychiatrists, will probably find this book difficult and slow reading, because of relatively unfamiliar terminology, apparent coinage of new words and phrases and an abstruseness of language which often obscures more than it clarifies. Although it is the opinion of this reviewer that the language usage of the book is a disservice to its content, this statement is made with the recognition that a new frame of reference often requires new terms and language structure. It is speculative, rather than a logically based judgment, that the material could have been presented more clearly.

The author approaches a difficult and involved task in his attempt to integrate the phenomenology of psychopathic disorders, and the book represents a courageous attempt to perform this task. Whether the theoretical formulations are correct or, indeed, whether they can be easily validated, does not seem to be the crucial issue. The book presents psychopathy in a somewhat integrated frame of reference which is at least somewhat susceptible to attempts at clinical proof or disproof and is of value for this reason. The author stresses the "time concept," in discussing dynamics and this emphasis seems a welcome addition to dynamic concepts. He makes the point more emphatically than it is usually made that particular kinds of interpersonal relationships and interaction are not necessarily identical unless one can demonstrate that they occur at identical periods in the development of the individual. In other words, a problem of maternal rejection is not the same to a child of one month as to a child of one year or a child of ten or a child of fifteen. Though this seems truistic, it is too often ignored in psychodynamic literature.

All in all, the book appears a valuable addition to the literature on psychopathy despite its semantic acrobatics and it is to be recommended for the interest of its point of view to all those interested in this type of disturbed behavior.

D. A. Schwartz, M.D.

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THE CARE OF MINOR HAND INJURIES—Adrian E. Flatt, M.A., M.D., F.R.C.S., Assistant Professor of Orthopedic Surgery, State University of Iowa, Iowa City, Iowa. With foreword by Carroll B. Larson, M.D. The C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Mo., 1959. 266 pages, illustrated, $9.50.

This book is a guide for those practitioners who have had limited experience in treating hand injuries. Furthermore, the text is meant to cover those injuries which Dr. Flatt feels are amenable to out-patient care.

The first of two sections includes four chapters on general principles of minor hand surgery. Topics which are briefly but lucidly discussed are functional anatomy, surgical techniques peculiar to this field, preoperative and postoperative suggestions, as well as methods of examination and classification of injuries.

Specific injuries are dealt with in the following eleven chapters. The methods of treatment are those which the author has personally found to be safe and practical. The text, selection of photographs and drawings are generally excellent.

However, several illustrated plastic maneuvers are beyond the scope of minor surgery. These include dorsal rotational flaps and volar transpositional flaps which will be regarded by some as unacceptable as here described and illustrated.

Fortunately, in the chapter on pulp loss, the pitfalls of thenar flaps are well depicted. The uninitiated will thus leave them for the expert to utilize in exceptional circumstances. A formal discussion on handling of the volar digital nerves would be helpful since many stumps are crippling because the average surgeon is frequently not cognizant of these two troublesome structures.

It is felt that the practitioner may be frustrated if he attempts to treat the common mallet finger by the conservative method, using a plaster cast as illustrated. An alternate means of splinting is not shown. Though the text on fractures is good, here again more illustrations in the actual use of splints is desirable.

In this rather limited and specialized field a book of this type is a definite asset. The industrial surgeon, generalist, and orthopedic surgeon will find it useful. It is readable, well organized, and recommended to those interested in hand surgery.

Robert L. Brown, M.D.

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DOCTOR'S LIFE OF JOHN KEATS, A—Walter A. Wells, M.D. Vantage Press, Inc., 120 W. 31st Street, New York 1, New York, 1959. 247 pages, $3.95.

Under this title as justification Dr. Wells has done a rather poor biography of the great poet. The style is jerky, the material not well organized, the digressions numerous and often tedious, and through this Keats wanders like a shadow which never becomes very real. Even the account of Keats' illness is packed with extraneous matter and the philosophical reflections on the mystery of genius which follow are at times far-fetched. One doubts whether this book adds much to the literature on Keats.

Arthur L. Bloomfield, M.D.

SOIL, GRASS AND CANCER—Health of Animals and Men Is Linked to the Mineral Balance of the Soil—André Voisin, Membre de l'Académie d'Agriculture de France; Chargé d'Enseignement à l'École Nationale Vetérinaire d'Alfort (Paris). Translated from the French by Catherine T. M. Herriot and Dr. Henry Kennedy, Secretary, Irish Agricultural Organisation Society Ltd. Philosophical Library Inc., 15 East 40th Street, New York 16, N. Y., 1959. 302 pages, $15.00.

There is an old French saying that "we are what we eat." The author of this book, a member of the French Academy of Agriculture and the staff of the National Veterinary College in Paris, goes a step further. He believes that the control and prevention of cancer lies in a better understanding of human nutrition, especially as it pertains to mineral metabolism. However, most of his statements are speculative, and few data are provided clearly relating mineral deficiencies in the soil with spontaneous cancer in humans.

Nevertheless, since we do not know all the causes of cancer, and since there is perpetual exhortation to return to the grass roots, the author's reputation for producing the most highly productive methods of grassland management must be noted. Indeed, it was while working at his agricultural pursuits and watching his cows eat grass that "the scientific philosophy embodied in this work evolved."

He believes that the carcinogenic effects of tobacco can be reduced by a suitable diet. Indeed, he opines that the more rapid development of cancer among smokers today is due to alterations in our diet which has thus become less protective. "Exhortations to give up tobacco smoking are hardly likely to have any more effect than sermons on virtue, so the hopes of man must be placed on improving the protective characteristics of the diet." A simple step would be substituting whole wheat for white bread.

Correlations of geographic soil conditions and gastric cancer are recorded in some detail. By improving the soil, by adjusting the amount of estrogens fed to animals, the amount of insecticides sprayed on fruit and vegetables, and other allied steps he thinks progress will be made.

There is a foreword by Dr. Allan Fraser who expresses sympathy with Mr. Voisin's speculative views *because*, while the French colleague was watching over cows in France, he was watching over sheep in Scotland. Like a good Scotsman, this same foreworder terminates his piece with the sentence "I should be guilty of hypocrisy were I not to confess that I still find the hypothesis just a little too simple to be altogether true." This reviewer tends to concur.

L. H. Garland, M.B.

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HANDBOOK OF POISONING: DIAGNOSIS AND TREATMENT—Second Edition—Robert H. Dreisbach, M.D., Ph.D., Professor of Pharmacology, Stanford University School of Medicine, Lange Medical Publications, Los Altos, 1959. 474 pages, $3.50.

This new edition is changed so little from the first edition that the extra cost of making the few changes seems scarcely justified. However, a few valuable changes have increased the usefulness of this already useful handbook. First may be mentioned the summary of instructions for first aid measures to be telephoned by the physician, printed on the inside of the cover and the adjacent fly-leaf. Second, the darker type, with black-faced headings makes reading and finding desired information easier and thus facilitates managing emergency situations. Another noteworthy addition is the section on diagnosis and treatment of electrolyte imbalance, found so often with prolonged vomiting, diarrhea or water and food deprivation.

Since this work is an emergency handbook and not a textbook, it is questionable whether so much space should be given to chemical formulas and to pictures of the many types of resuscitation equipment. The physician is not interested in the chemical structure of a toxic agent when confronted with a case of poisoning and he will not have an opportunity to select the most appropriate resuscitation apparatus. If justified at all in a book on poisoning, it would be better to include these in a classroom textbook or a more academic treatise.

This flexible-backed, pocket size book of six sections, 37 chapters and 467 pages is organized in an unusual way; the poisons are grouped largely according to use, as Pesticides, Industrial Hazards, Household Chemicals, Medicinal Chemicals and Plant and Animal Hazards. The arrangement within each class seems to be based upon frequency or seriousness of poisoning, but this plan is not rigidly followed, and for this reason the sequence is somewhat haphazard. The first section includes excellent outlines of Emergency Management, Diagnosis, Supportive Management, Prevention and Physician's Legal and Medical Responsibility. Chapter 2 on Diagnosis and Evaluation of Poisoning is an outline based upon the classical method for examination of the patient: History, including occupational and other types of exposure; Symptom History, arranged according to physiological systems; Physical Examination and Laboratory Examination.

The author, a well trained pharmacologist, is obviously experienced in diagnosis and management of poisoning, and has been fortunate in having his academic office and laboratory adjacent to a teaching hospital. He is to be commended for preparing this practical handbook.

Clinton H. Thienes, M.D.

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MEDICAL MANAGEMENT OF THE MENOPAUSE (Modern Medical Monographs 17)—Minnie B. Goldberg, M.D., Associate Clinical Professor of Medicine, University of California School of Medicine; Consultant in Medicine and Endocrinology, Mount Zion Hospital; Attending Staff Physician in Endocrinology, Children's Hospital, San Francisco, Calif. Grune & Stratton, 381 Fourth Avenue, New York 16, N. Y., 1959. 98 pages, $4.50.

The major emphasis of this book, as the title implies, is on therapy. Although treatment includes reassurance, sedation and psychotherapy, gonadal steroidal substitution is required in approximately 50 per cent of women. Whether or not one believes in the liberal use of hormones in this situation the book contains a number of suggestions which most gynecologists would be reluctant to accept. Four such controversial statements are:

1. The author lists 38 symptoms as being menopausal in origin and therefore correctable by proper steroid therapy.

2. The use of "progestens" to achieve a "medical curettage" makes such agents useful in the management of the menopause.

3. The use of androgenic substances locally is beneficial at times and well worth a trial in patients with stress incontinence due to relaxation and atrophy of pelvic tissues.

4. The suggestion that parenteral estrogens be used to control menopausal symptoms in patients who are still menstruating.

This monogram is essentially a treatise representing the strong convictions of the author that steroid therapy is to the menopausal woman as insulin is to the diabetic. The stated purpose of the book is to aid "the young practitioner" who, because of conflicting teaching, may be bewildered by uncertainties in the diagnosis and management of the disturbances of the menopause. As such the reviewer suggests that one might modify the author's paraphrase of Lincoln's to better read "You may fool some of the young practitioners all of the time and all of the young practitioners some of the time, but you cannot fool all of the young practitioners all of the time."

Donald L. Hutchinson, M.D.

SYNOPSIS OF GYNECOLOGY—Fifth Edition—Robert James Crossen, M.D., Associate Professor of Clinical Gynecology and Obstetrics, Washington University School of Medicine, St. Louis; Daniel Winston Beacham, M.D., Assistant Professor of Clinical Obstetrics and Gynecology, Tulane University School of Medicine; and Woodard Davis Beacham, M.D., Professor of Clinical Obstetrics and Gynecology, Tulane University School of Medicine. The C. V. Mosby Company, St. Louis, 1959. 340 pages, illustrated, $6.50.

This small volume is intended as a guide for students and general practitioners who require a knowledge of the principal facts and general principles of gynecology but not the detailed knowledge necessary for specialization. The emphasis is on the practical, in tests, methods of examination, and treatment. For the most part the management suggested is modern and generally acceptable. The first chapter furnishes an adequate outline of the anatomy and physiology of the female genitalia. The second chapter deals with gynecologic examination and diagnosis and is rather more detailed than the descriptions of diseases. It is a very satisfactory treatise with adequate illustrations and references. The subsequent chapters deal with Malformations, Diseases of the Vulva, (less than a page is devoted to vulval cancer), Diseases of the Vagina, Malpositions of the Uterus, Pelvic Infections, Benign Lesions of the Uterus, Malignant Lesions of the Uterus, Endometriosis, Ovarian Tumors, Complications of Pregnancy, Disturbances of Function, Infertility (four pages), Miscellaneous Disturbances (such as the climacteric, backache, and the breast) and a short section on Medicolegal Points in Gynecology.

As indicated above the views expressed seem sound enough though somehow the patient seems to lose her identity as a human being; the various diseases, tests and treatments seem to assume a rather detached character.

This is the kind of small book—it would fit easily into one's coat pocket—that should prove to be very popular with medical students.

DANIEL G. MORTON, M.D.

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SYSTEMIC LUPUS ERYTHEMATOSUS—A Mount Sinai Hospital Monograph—Editors George Baehr, M.D., and Paul Klemperer, M.D. Contributions to the Symposium by Members of the Staff of the Mount Sinai Hospital, New York. Grune & Stratton, 381 Fourth Avenue, New York 16, N. Y., 1959. 84 pages, $3.75.

This is an excellent coverage of a disease that is much more commonly recognized than previously. The pathology is well depicted. The discussion of the pathogenetic significance of the lupus erythematosus cell phenonemon is exceedingly good. There is, also, very good coverage of the clinical picture, including treatment. This constitutes one of the best sources of authoritative information on this subject with which this reviewer is familiar.

JOHN S. LAWRENCE, M.D.

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SYNOPSIS OF EAR, NOSE, AND THROAT DISEASES—Robert E. Ryan, B.S., M.D., M.S., (ALR), F.A.C.S.; Department of Otolaryngology, St. Louis University School of Medicine; Associate Otolaryngologist, St. John's Hospital, St. Louis; William C. Thornell, A.B., B.M., M.D., M.S. (ALR), F.A.C.S.; Assistant Professor, Department of Otolaryngology, Cincinnati College of Medicine, University of Cincinnati; and Hans von Leden, M.D., F.A.C.S., F.I.C.S.; Assistant Professor of Otolaryngology, Northwestern University Medical School, Chicago. The C. V. Mosby Company, 3207 Washington Blvd., St. Louis 3, Mo., 1959. 383 pages, illustrated, $6.75.

As stated in the title, this book is a symposium or digest of diseases of the ear, nose and throat, and as such covers the specialty very well. It is brief and concise. It is especially useful for reference for general practitioners; interns and lawyers, who deal with medical problems and any one interested in the subject.

It is written so clearly that anyone, medical men or the laity can comprehend it. Of course no details of surgical technique or complete medical treatment are given, as it is not designed for such coverage.

The 59 drawings are excellent and aid in making the text clear.

It is well written and is backed by the authors' vast amount of experience as practitioners and teachers.

It should be on the reference shelf of otolaryngologists and others interested in the subject.

LAWRENCE K. GUNDRUM, M.D.

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SURGEON AND THE CHILD, THE—Willis J. Potts, M.D., Surgeon in Chief, Children's Memorial Hospital; Professor of Pediatric Surgery, Northwestern University Medical School, Chicago. W. B. Saunders Company, Philadelphia, 1959. 255 pages, $7.50.

Dr. Willis J. Potts has written, in a beautiful manner, a textbook on the surgical problems of infancy and childhood. Basically, the book consists of the author's personal experiences and those of the staff of Children's Memorial Hospital of Chicago, reported in a conversational style, as he would tell it to you personally.

There is much on diagnosis, indications and contra-indications for surgery and a splendid chapter on the understanding of infants and children who are ill. Pre-operative and post-operative care are well presented. On the whole the book is adequately illustrated. There are no references and no attempt is made to review the previous literature on the various diseases.

Most of the subject matter concerns itself with the problems of congenital anomalies. There are excellent chapters on congenital atresia of the esophagus, undescended testicle, Hirschsprung's disease and most of the common problems due to developmental defects. The chapters dealing with respiratory problems in the newborn as well as infants and young children, and the congenital cardiovascular anomalies amenable to surgery are exceptionally well done.

This volume will be extremely helpful not only to surgeons dealing with surgical problems of infancy and childhood, but also to pediatricians, general practitioners, obstetricians and young physicians in training for special fields of surgery.

L. R. CHANDLER, M.D.

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PROGRESS IN HEMATOLOGY—Volume II—Leandro M. Tocantins, M.D., with 19 Contributors. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, New York, 1959. 290 pages, $9.75.

This book follows Volume I which appeared in 1956. All of the papers will be of interest to hematologists, although one wonders about the inclusion of a surgical paper on esophageal varices. A brief review of phase microscopy and cinematography in hematology by Bessis is well illustrated and of interest to all. There is a basic and excellent review of factors in the sickling phenomenon; also papers on the hematologic aspects of serotonin and lipid anticoagulants. For the pediatrician and pathologist, there are papers on Kernicterus and ABO Incompatibility. There is a review of platelet transfusion and Wilkinson's experience with Myleran in chronic myeloid leukemia. Bone marrow transplantation and radiation injury, humoral factors in erythropoiesis, blood preservation and transmission of leukemia are reviewed. For the most part the papers are well chosen, well written, up to date and timely. The book is highly recommended, and the reviewer looks forward to Volume III.

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Need for Rehabilitation Facilities to Increase

A young hospital administrator suffered a spinal injury resulting in paralysis of his arms and legs.

At first, he was completely dependent on others. But through an intensive course of rehabilitation, he learned to feed himself, shave, write, use a dictaphone and perform other hand activities with the aid of simple mechanical devices. He now is able to operate an electric wheel chair which provides him a large measure of independence and mobility. And, even though his disability remains, he will return to his former type of work.

A 42-year-old mechanic, whose legs were amputated following an accident, also has returned to a bench-type mechanic's job. Through rehabilitation, he learned to walk on artificial legs. He lives at home, drives a hand-controlled car to and from work, and is completely independent.

These cases, described in the January 16 issue of the *Journal of the American Medical Association*, are but 2 of the 30 million persons who require long-term care, according to Dr. Louis B. Newman, Chicago, president of the American Academy of Physical Medicine and Rehabilitation. They demonstrate how rehabilitation procedures can return the sick and injured to productive lives.

"The problem of the rehabilitation and care of the long-term patient is of tremendous magnitude," Dr. Newman said. "Both the increase in population and the increase in the human life span bring us face to face with the realization that the number of persons with illness and injury will parallel these increases.

"We must be fully aware of and quickly correct an old and, at times, persistent notion that long-term or chronically ill persons are all in the older age bracket. As a matter of fact, about 16 per cent of persons with chronic disease are under 35 years.

"The increased incidence of heart disease, the yearly increase in the number of cancer deaths, the rising number of severe disabilities from accidents . . . the alarming rise in the incidence of mental disorders, the steadily rising number of disabilities resulting from degenerative diseases, and blindness and impaired or loss of hearing associated with the aging and the aged—all contribute toward the large segment of the population that needs prolonged care.

"It is not a one-man job and must be squarely faced by all federal, state, and community institutions and agencies whose programs should be actively coordinated and integrated . . . to achieve the greatest measure of success.

"There must be sufficient hospitals, rehabilitation services and centers, nursing and convalescent homes, sheltered workshops, homes for the aged, and adequate numbers of properly trained professional personnel to handle this great patient load."

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Nursing homes should be equipped for continued maintenance activities to prevent the partially disabled patient from deteriorating eventually to total dependence, Dr. Newman said.

"Life is being prolonged, but it should also be enriched," he said.

Dr. Newman also is chief of the Physical Medicine and Rehabilitation Service, Veterans Administration Research Hospital, and professor of physical medicine and rehabilitation at Northwestern University Medical School.

Heart Ailments Top Killer of Aged

Diseases of the heart and blood vessels are the major cause of death among persons over 80, a study conducted at the University of Colorado indicated recently.

Dr. R. M. Mulligan of the department of pathology, University of Colorado School of Medicine, Denver, reported on his study of more than 300 deaths in the January issue of American Medical Association *Archives of Pathology*.

He said an evaluation of fatal disease of old age should help doctors anticipate and treat ailments among elderly patients at an earlier and more amenable stage.

Autopsies performed on 336 persons who died at Colorado General Hospital between 1940 and 1955 showed 37 per cent died of cardiovascular disease, 16.3 per cent of cancer, 12.4 per cent of infectious diseases, and 12.1 per cent of accidental injuries.

High blood pressure was the leading killer among cardiovascular disorders followed by hardening of the arteries. The most prevalent type of cancer was that of the prostate gland. The most frequently fatal infectious disease was bronchopneumonia.

Heart disease and cancer are the number one and two causes of death among the general population. Cancer of the skin is the most prevalent type among persons of all ages.

The study indicated a higher ratio of heart disease, cancer, and infectious disease among men than women.

The 336 persons included 239 men and 97 women, a ratio of 2.45. The incidence of heart ailments showed a ratio of 3.67, of cancer 3.14, and of infectious disease 3.9.

However, more women than men died of accidental injuries. Of 43 accidental deaths, 24 were women and 19 men. The most frequent locale of the accident was the home (37 cases) and the most frequent type was a fracture (36 cases).

The figures also showed that there was at least a 50 per cent chance that the primary cause of death would be many of the cardiovascular diseases, cancer, an accidental injury, appendicitis, or diabetes mellitus.

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Over 3000 diabetics have been carefully studied on DBI daily for varying periods up to three years. No histologic or functional changes in liver, blood, kidneys, heart or other organs were seen.

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*Send for brochure with complete dosage instructions for each class of diabetes, and other pertinent information.

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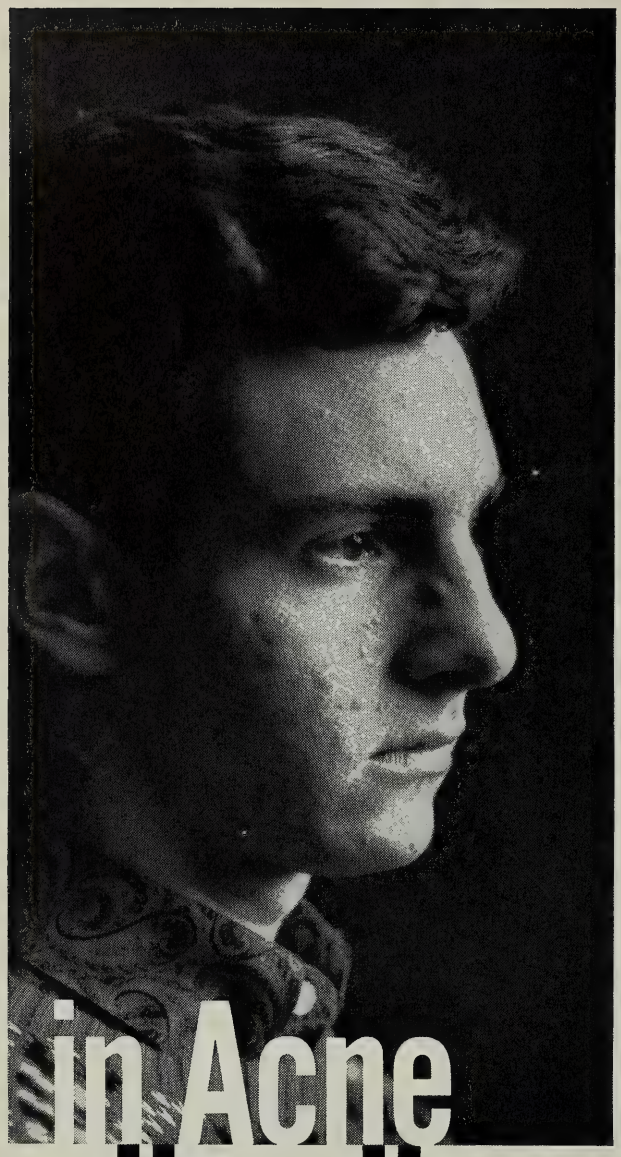
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References: 1. Muir, A.: Aspirin and Gastric Damage, Scientific Exhibit, A.M.A. Convention, Atlantic City, N. J., June 8-12, 1959. 2. Waterson, A. P.: Brit. M.J. 2:1531, 1955. 3. Editorial Comments: The effect of acetylsalicylic acid on the gastric mucosa, Canad. M.A.J. 80:47, 1959. 4. Muir, A., and Cossar, I. A.: Brit. M.J. 2:7, 1955. 5. Muir, A., and Cossar, I. A.: Lancet 1:539, 1959. 6. Schneider, E. M.: Gastroenterology 33:616, 1957. 7. Bayles, T. B., and Tenckhoff, H.: Salicylate Therapy in Rheumatic Diseases, Scientific Exhibit, Ann. Mtg. A.M.A., San Francisco, Calif., June, 1958. 8. Douthwaite, A. H., and Lintott, G. A. M.: Lancet 2:1222, 1938. 9 Batterman, R. C.: New Eng. J.M. 258:213, 1958. 10. Cronk, G. A.: New Eng. J.M. 258:219, 1958. 11. Editorial: Aspirin plain and buffered, Brit. M.J. 1:349, 1959. 12. Smith, P. K.: Plasma concentration of salicylate after the administration of acetylsalicylic acid or calcium acetylsalicylate to human subjects, Report submitted to Smith-Dorsey from the Dept. of Pharmacology, Geo. Washington Univ. School of Medicine, Washington, D. C., Sept. 5, 1958.

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1. Smylie, H. G.; Webster, C. U., and Bruce, M. L.: *Brit. M. J.* 2:606, Oct. 3, 1959. 2. Hodges, F. T.: *GP* 14:86, Nov., 1956.

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Impartial Expert Idea for Medical Testimony Spreads

Plans designed to provide impartial medical testimony and speed settlement of personal injury claims appear to be gaining support, the *Journal of the American Medical Association* said recently.

Three out of every four cases on the nation's crowded court calendars require some type of medical report.

The idea that justice is best served by one doctor

(Continued on Page 72)

Practice of Surgery in a Neuropsychiatric Hospital*

Psychotic patients present special difficulties in both diagnosis and treatment, yet 13 years of experience in a neuropsychiatric veterans hospital have shown that the presence of a psychosis does not alter the physical signs of disease and does not preclude the obtaining of a medical history or the administration of modern therapy. In surgical cases, preoperative management includes due preparation for all the experiences in the operating room; consent to operation has been refused only in extremely rare instances, and it is no longer necessary to struggle with patients to get them anestheticized. When the cooperation of a patient is needed for operations under local anesthesia, preoperative medication generally should be minimal. The postoperative course is usually uneventful, but it is necessary to remember that the psychotic patient seldom complains of pain, is not likely to be careful with tubes and catheters, cannot be counted upon to cough up secretions, and may attempt ambulation too soon. The psychiatric behavior of the patient is especially important in orthopedic surgery because splints, casts, and traction apparatus may be tampered with or misused as lethal weapons by assaultive or suicidal patients. Trusses, braces, colostomy bags, and ambulatory urinals are unsuitable for most psychotic patients, and with patients potentially suicidal the triangular bandage, the elastic bandage, lengths of roller bandage or adhesive tape, as well as clips or safety pins, must be avoided. Difficulties with urination and defecation have frequently been found to be an expression of the psychosis itself, but the two functions interfere with each other in the sense that a greatly distended bladder has at times been found to prevent evacuation while in other cases fecal masses in patients with megacolon have caused urinary retention. Cataract extractions have been successful in 19 psychotic patients, with definite changes for the better in 10 patients whose improved vision greatly increased their capacity for self-care. The presence of a full-time surgeon in a neuropsychiatric hospital has been shown to result in a low surgical mortality rate; it also is reassuring to the patients and their families.

*Abstract from A.M.A. Arch. Gen. Psychiat., 1:123-131, Aug. 1959, Walter E. Marchand.



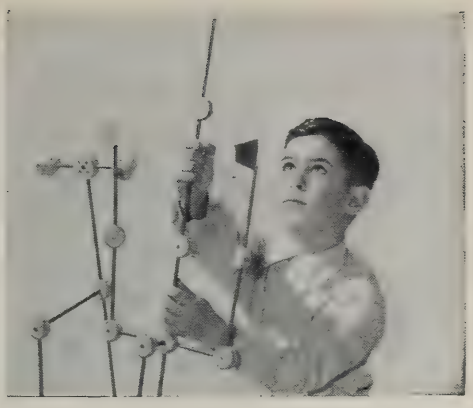
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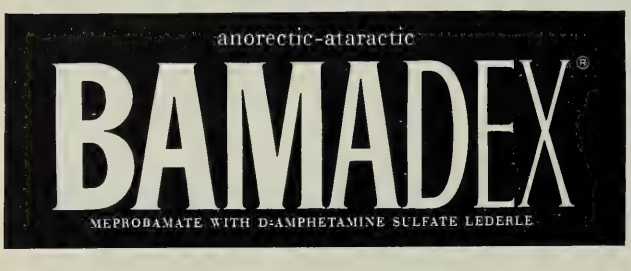
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Impartial Expert Idea for Medical Testimony Spreads

(Continued from Page 70)

testifying as an impartial expert rather than two or more doctors presenting differing viewpoints has been endorsed by the American Association for the Surgery of Trauma. The American Medical Association is closely watching the move.

According to the A.A.S.T., nine states have instituted programs whereby authoritative medical and judicial bodies agree jointly to cooperate in securing the testimony of impartial medical experts, or are considering such plans. The states are California, Illinois, New Jersey, Maryland, Massachusetts, Minnesota, Ohio, Pennsylvania, and New York.

"The plan's great success, undeniably, is being chalked up in its birthplace, New York City," according to the article in the Medicine At Work section of the January 23 *Journal.*

"There, where it has been in operation for seven years, recent figures indicate that questionable claims are dwindling and fewer cases are coming to trial. Why? Advocates of the system say it is because lawyers have recognized the proficiency of the physician panel on matters of a medical nature."

C. Joseph Stetler, director of the American Medical Association's Law Division, said, "Medicine does not feel that a panacea has yet been discovered, however, it does look with interest on such projects and considers them a constructive approach."

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Acute Dissecting Aneurysm of the Aorta*

Surgical correction of dissecting aneurysm of the aorta is now possible. The exact diagnosis of this condition is therefore more important than ever. The histories of 11 patients who underwent surgery have been analyzed in order to identify retrospectively the symptoms and findings most valuable in establishing the diagnosis. The most important was a history of very severe pain which usually radiated to the back and frequently moved from its original location to another area; it was more severe than the pain of myocardial infarction and particularly significant in the absence of electrocardiographic abnormalities. Roentgenograms were of critical importance in 9 of the 11 cases, especially in one instance when the aortogram showed a double-barreled lumen. A difference in the peripheral pulses was present in 6 cases. Systolic murmur, abdominal bruit, and an abdominal mass occurred in less than half of the cases, but were helpful diagnostic points when they did occur. Four of the 11 patients survived surgery and did well after operation. Although the mortality in this series was high, the risks of allowing acute dissecting aneurysm to go untreated are so great that the authors advise prompt operation as soon as diagnosis is established.

*Abstract from A.M.A. Arch. Int. Med., 104:217-225, Aug. 1959, Julian R. Beckwith, William H. Muller, W. Dean Warren, and J. Edwin Wood Jr.

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Supply: Chemipen Tablets of 125 mg. (200,000 u.) and 250 mg. (400,000 u.), bottles of 24 tablets. Chemipen Syrup (cherry-mint flavored, nonalcoholic), 125 mg. per 5 cc., 60 cc. bottles.

*Knudsen, E. T., and Rolinson, G. N.: Lancet 2:1105 (Dec. 19) 1959.

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The Medical Radio System, an exclusive-for-doctors communications system, will begin serving the nation's medical community during the fall of 1960. Two years of research, including discussions with individual physicians, groups of doctors, and officials of national and local medical societies, preceded RCA's decision to put the Medical Radio System into operation.

Aimed at helping doctors keep abreast of medical developments, the Medical Radio System will broadcast medical news, information and educational programs over what amounts to a radio closed circuit system for the medical profession.

The Medical Radio System will be staffed by prominent physicians nationally selected and from all fields of practice. The Medical Radio System will be completely under the control of and responsible to the Medical Profession.

A Medical Board has been established with Chester Scott Keefer, M.D., as Chairman. Dr. Keefer is President-Elect of the American College of Physicians and Executive Director of the Boston Medical Center. Also serving on the Board are Drs. Arthur DeGraff, Joseph Garland, Howard Rusk, Frank Woolsey and Edward Rosenow. Other appointments

(Continued on Page 80)

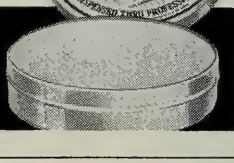
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(Continued from Page 78)

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Pediatric Surgery	One Week, April 25
Internal Medicine	Two Weeks, May 2
Board of Surgery Review, Part II	Two Weeks, May 16
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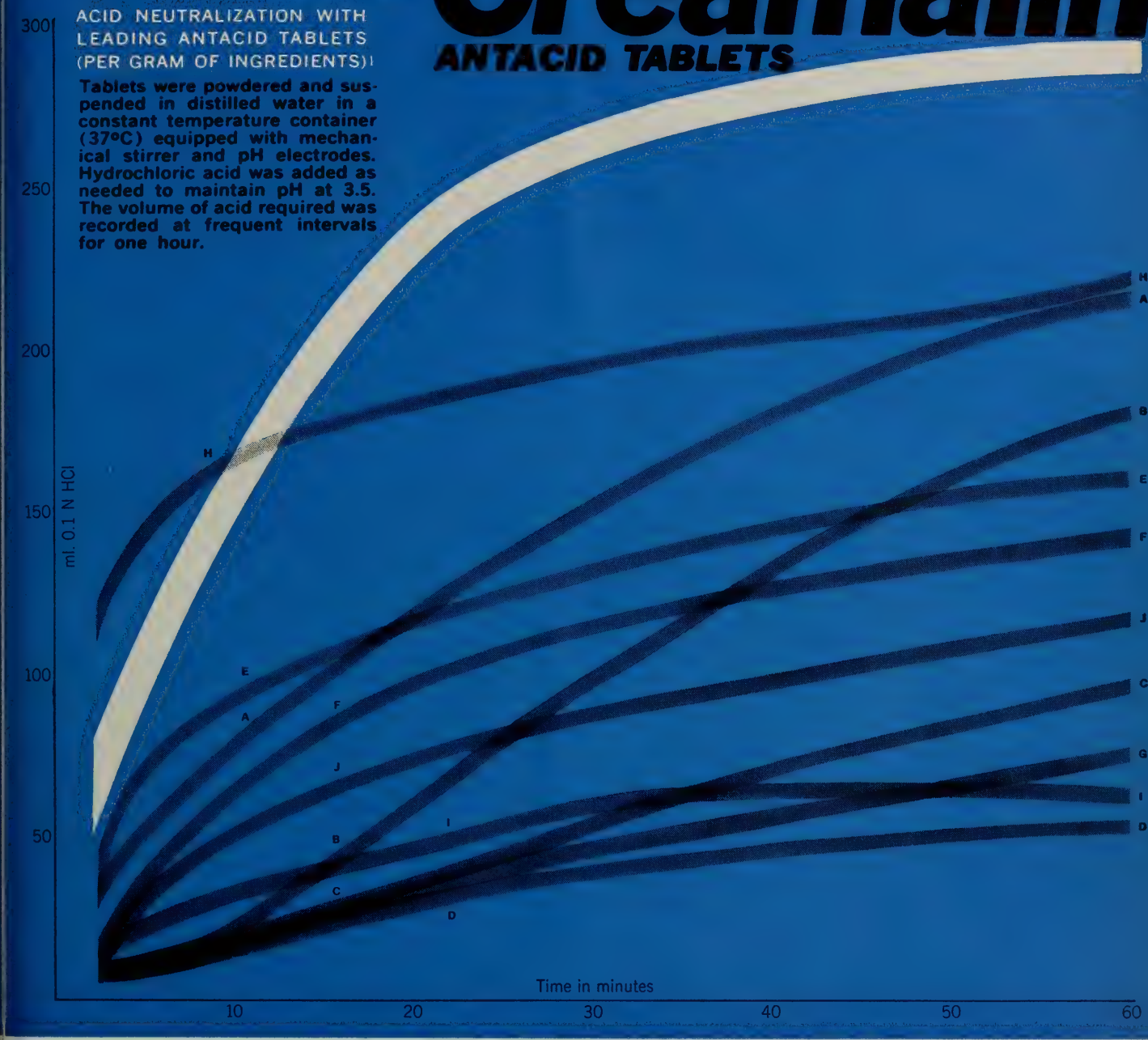
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1. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A. (Scient. Ed.)* 48:380, July, 1959. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A. (Scient. Ed.)* 48:384, July, 1959.

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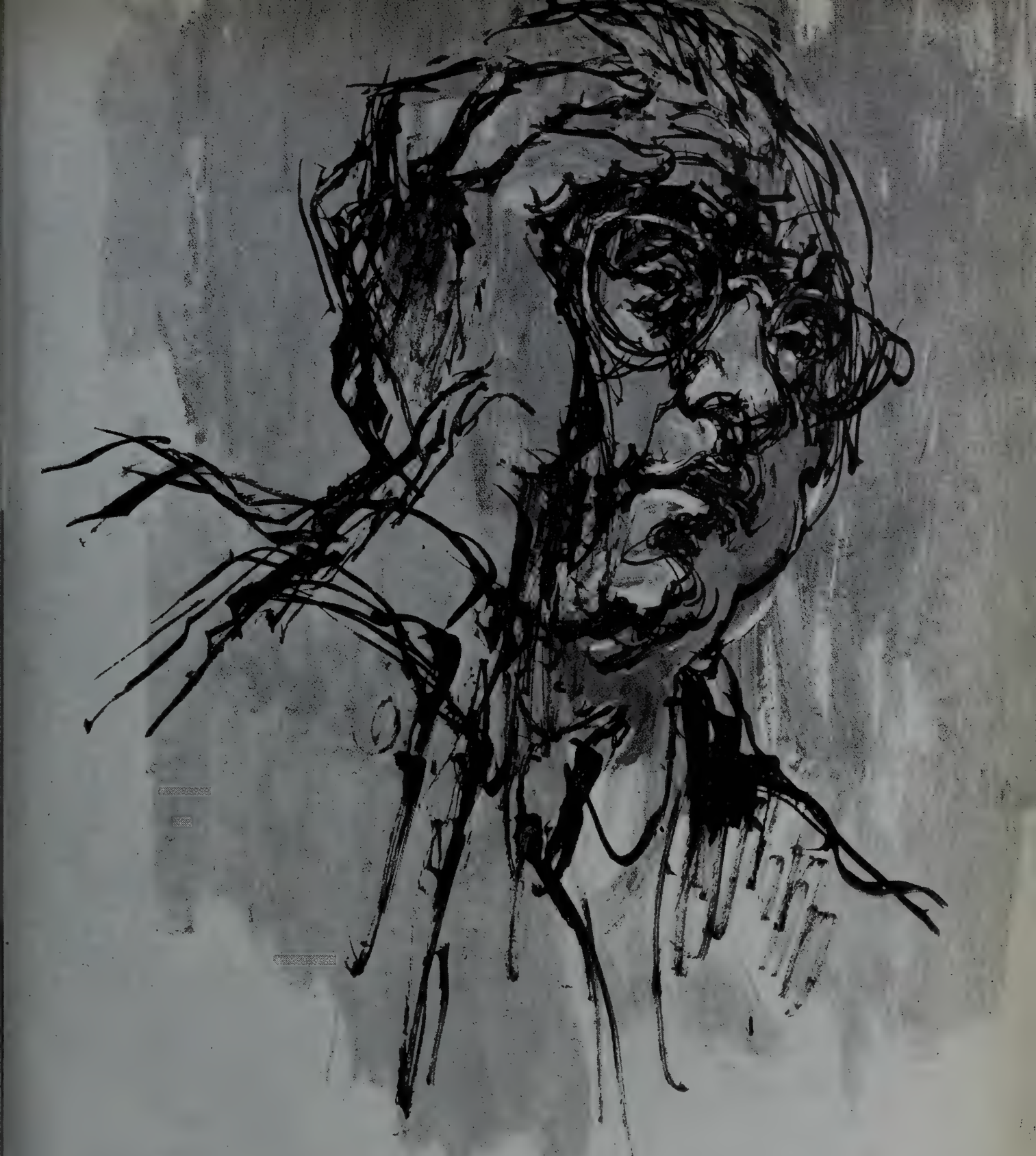
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1. Goddard, E.S.: in *Trifluoperazine, Further Clinical and Laboratory Studies*, Philadelphia, Lea & Febiger, 1959.

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leaders in psychopharmaceutical research





When blood pressure must come down

When you see symptoms of hypertension such as dizziness, headache, and fainting your patient is a candidate for Serpasil-Apresoline. Even when single-drug therapy fails, Serpasil-Apresoline frequently can bring blood pressure down to near-normal levels, reduce rapid heart rate, allay anxiety.

SUPPLIED: Tablets #2 (standard-strength, scored), each containing 0.2 mg. Serpasil and 50 mg. Apresoline hydrochloride; Tablets #1 (half-strength, scored), each containing 0.1 mg. Serpasil and 25 mg. Apresoline hydrochloride.

SERPASIL®-APRESOLINE®

hydrochloride (reserpine and hydralazine hydrochloride CIBA)

CIBA
SUMMIT, N. J.

2/2765MK

Bed Rest Suggested for Heart Victims

Prolonged bed rest was revived recently as a means of treating persons suffering persistently enlarged hearts.

Drs. George E. Burch and John J. Walsh of New Orleans wrote in the January 16 *Journal of the American Medical Association* that new drugs have been so successful in treating many heart ailments that "continued bed rest is greatly neglected, even in patients with rheumatic heart disease."

They said preliminary findings showed that strict bed rest for periods up to one year produced "extremely promising results" among patients suffering nonrheumatic degeneration of the heart's muscle tissue and enlargement of the heart.

"Our concern has been principally directed to those typically young patients, with severe, seemingly, irreversible cardiomegaly [enlarged heart], who follow a progressively downhill course, dying . . . usually within 2 to 12 months after the onset of illness," the doctors said.

"As the patient progresses along the spectrum of decreasing cardiac reserve to the stage of irreversible cardiac dilatation and insufficiency, he reaches a point at which he becomes unresponsive to any and all forms of therapy. It is our contention that the application of long-term bed rest not only delays in time the attainment of the point of no return but may, in selected cases, postpone this catastrophe indefinitely."

The authors based their report on five patients. Three patients' hearts returned to normal size and the other two showed remarkable improvement after prolonged bed rest.

The doctors admitted that their approach presents many problems, such as finding an adequate number of hospital beds. However, they suggested that facilities available for the treatment of tuberculosis might be used.

Dr. Burch and Dr. Walsh are associated with the Tulane Medical School, the Charity Hospital of Louisiana, and the Research Laboratory, U. S. Public Health Service Hospital.

Moved Recently?

If your home or office address has changed recently, please send your old and new address promptly to

California Medical Association
or California Medicine
693 Sutter Street
San Francisco 2, California

plus a legible signature (no prescription signatures, please). Also, notify your county society of any change in address.

Home No Longer Symbol of Safety

The home can no longer qualify as the symbol of safety and security traditionally ascribed to it, the *Journal of the American Medical Association* said in an editorial in the February 6 issue.

The growing hazards attached to living in the modern home make it a decidedly unsafe place.

"Current accident records, especially involving children but by no means excluding adults, indicate the necessity for revised thinking," it said. "There is a demand on health and safety officials, the medical profession, educators, and enlightened public leaders to render progress toward easier living as safe as possible."

During the past 12 months, the editorial said, a great amount of publicity has been given to plastic bag suffocations, lead poisonings due to fumes from wooden battery cases burned for fuel, and carbon monoxide poisonings due to inadequate ventilation of space heaters, particularly in trailers.

However, the *Journal* said, many hazards have appeared without fanfare, incidental to the introduction of labor-saving machinery and the application of modern chemistry to home cleaning and sanitation problems. Detergents, chemical cleansers, and weed killers, all potential poisoners, were cited as examples.

"The dangers involved in increased use of potent drugs, particularly self-medication with barbiturates and other sleeping tablets, are increasing rather than diminishing despite warnings by medical and public health authorities," it said.

"Do-it-yourself equipment, particularly power tools, creates additional dangers, especially in the hands of the unskillful.

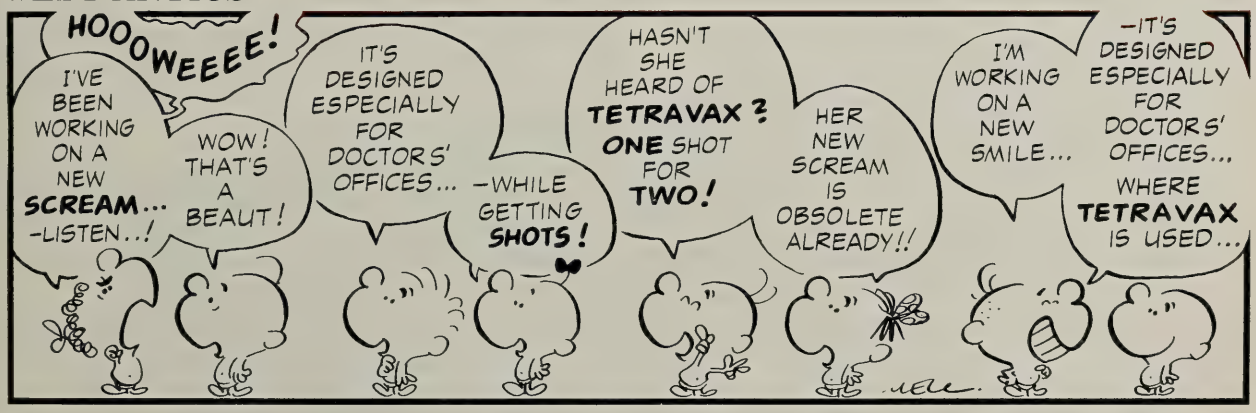
"The hazard of carbon monoxide poisoning is not limited to trailers and shack homes. Even the modern heating system, if improperly vented, may feed back carbon monoxide into the home, as may gasoline motors left running unattended in closed, attached garages.

"Despite slowly declining home accident rates, a new look at safety in the home is certainly indicated."

FOR SIMULTANEOUS IMMUNIZATION AGAINST 4 DISEASES:

Poliomyelitis-Diphtheria-Pertussis-Tetanus

PEDI-ANTICS



TETRAVAX®

DIPHTHERIA AND TETANUS TOXOIDS WITH PERTUSSIS AND POLIOMYELITIS VACCINES

now you can immunize against more *diseases...with* fewer *injections*

Dose: 1 cc.
Supplied: 9 cc. vials in *clear plastic* cartons. Package circular and material in vial can be examined without damaging carton. Expiration date is on vial for checking even if carton is discarded.



For additional information, write Professional Services, Merck Sharp & Dohme, West Point, Pa.

MERCK SHARP & DOHME, DIVISION OF MERCK & CO., INC., PHILADELPHIA 1, PA.

TETRAVAX IS A TRADEMARK OF MERCK & CO., INC.

A.M.A. Clarifies Advertising Acceptance Standards

The American Medical Association has clarified its standards for acceptance of advertising in 11 American Medical Association scientific publications.

The standards, which are published in the January 30 *Journal of the American Medical Association*, are designed to ensure the accuracy, comprehensiveness, timeliness, and relevancy of advertising content.

The standards list five guides for eligibility to advertise:

—Products or services eligible for advertising shall be germane to, effective in, and useful in the practice of medicine, and shall be commercially available.

—Pharmaceutical products will not be eligible for advertising until a New Drug Application from the Food and Drug Administration has become effective.

—"Institutional-type" advertising germane to the practice of medicine and "public service" messages of interest to physicians may be considered eligible for appearance in the scientific publications.

—Alcoholic beverages and tobacco products are not eligible for advertising.

(Continued on Page 106)

PHYSICIANS—

If you wish to buy or sell equipment . . .

If you need an associate . . . or partner . . .

If you are looking for a new location or position . . .

If you wish to sell your practice . . .

See CALIFORNIA MEDICINE's Classified Advertising—Page 93

IN
alcoholism

- helps normalize eating habits
- controls G.I. symptoms
- relieves emotional stress

Milpath®

®Miltown+ *anticholinergic*

relieves anxiety and tension for enhanced antispasmodic effect

WALLACE LABORATORIES

for therapy of overweight patients

• **d-amphetamine**
depresses appetite and elevates mood

• **meprobamate**
eases tensions of dieting
(yet without overstimulation, insomnia or barbiturate hangover)

BAMADEX®

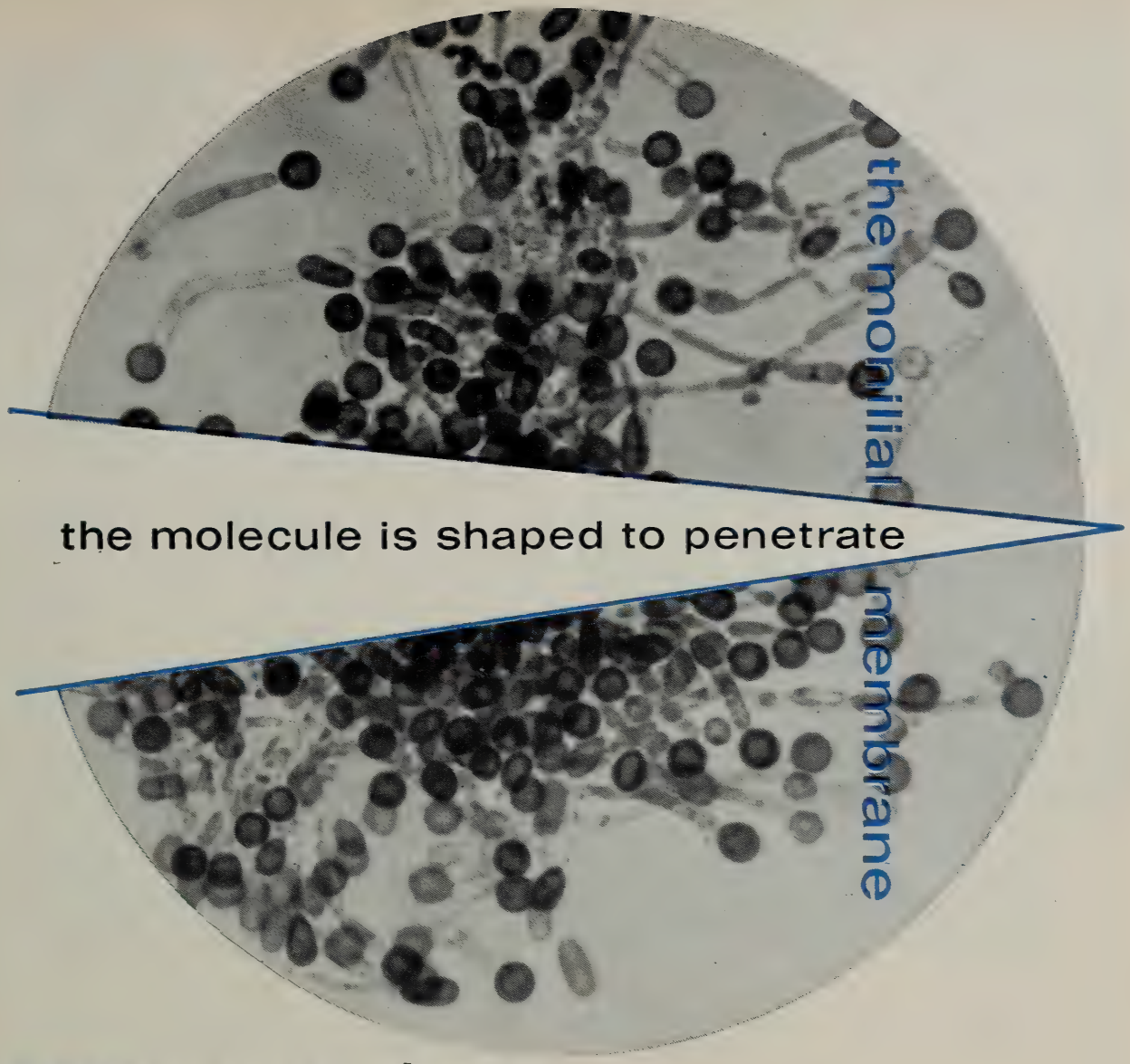
MEPROBAMATE WITH D-AMPHETAMINE SULFATE LEDERLE

is a logical combination in appetite control

Each coated tablet (pink) contains: meprobamate, 400 mg.; d-amphetamine sulfate, 5 mg
Dosage: One tablet one-half to one hour before each meal.

Lederle

LEDERLE LABORATORIES
A Division of AMERICAN CYANAMID COMPANY, Pearl River, New York



new non-staining SPOROSTACIN® Chlordantoin Cream

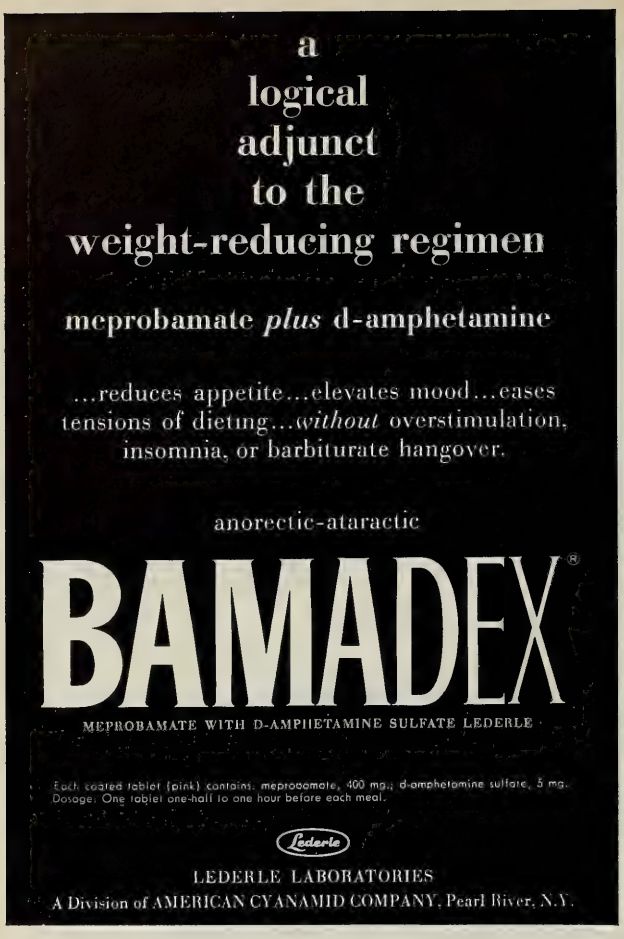
chemically different, non-staining, "shaped charge" monilicide
soothing, odorless, white

Exceptional fungicidal activity—The unique "shaped charge" molecular structure of the active agent in SPOROSTACIN Cream facilitates penetration of the fatty barrier of the fungous cell membrane for exceptional fungicidal activity.

Outstanding clinical results—"The use of this new compound, chlordantoin, in the treatment of vaginal candidiasis [moniliasis] offers the advantages of simplicity, patient acceptance, and rapid relief of symptoms, together with a high percentage of culture-free cures."

*Lapan, B.: Am. J. Obst. & Gynec. **78**:1320, 1959.

Ortho



A.M.A. Clarifies Advertising Acceptance Standards

(Continued from Page 104)

—The association may decide that certain products or services are not eligible for advertising in American Medical Association's scientific journals if advertisements for these products or services in other mediums consistently or significantly depart from the standards of suitability of copy as established by the association's Advertising Committee.

The article said, "As a matter of policy, the American Medical Association will sell advertising space in its publications when the buyer believes purchase of such space represents a sound expenditure; the inclusion of advertising material does not interfere with or seriously detract from the purpose of the publication, and the advertising copy meets the standards for such publication."

The remainder of the standards discuss suitability of advertising copy, procedures of the Advertising Committee, advertisements for specific types and classes of products and services, and the working time requirements for the Advertising Committee.

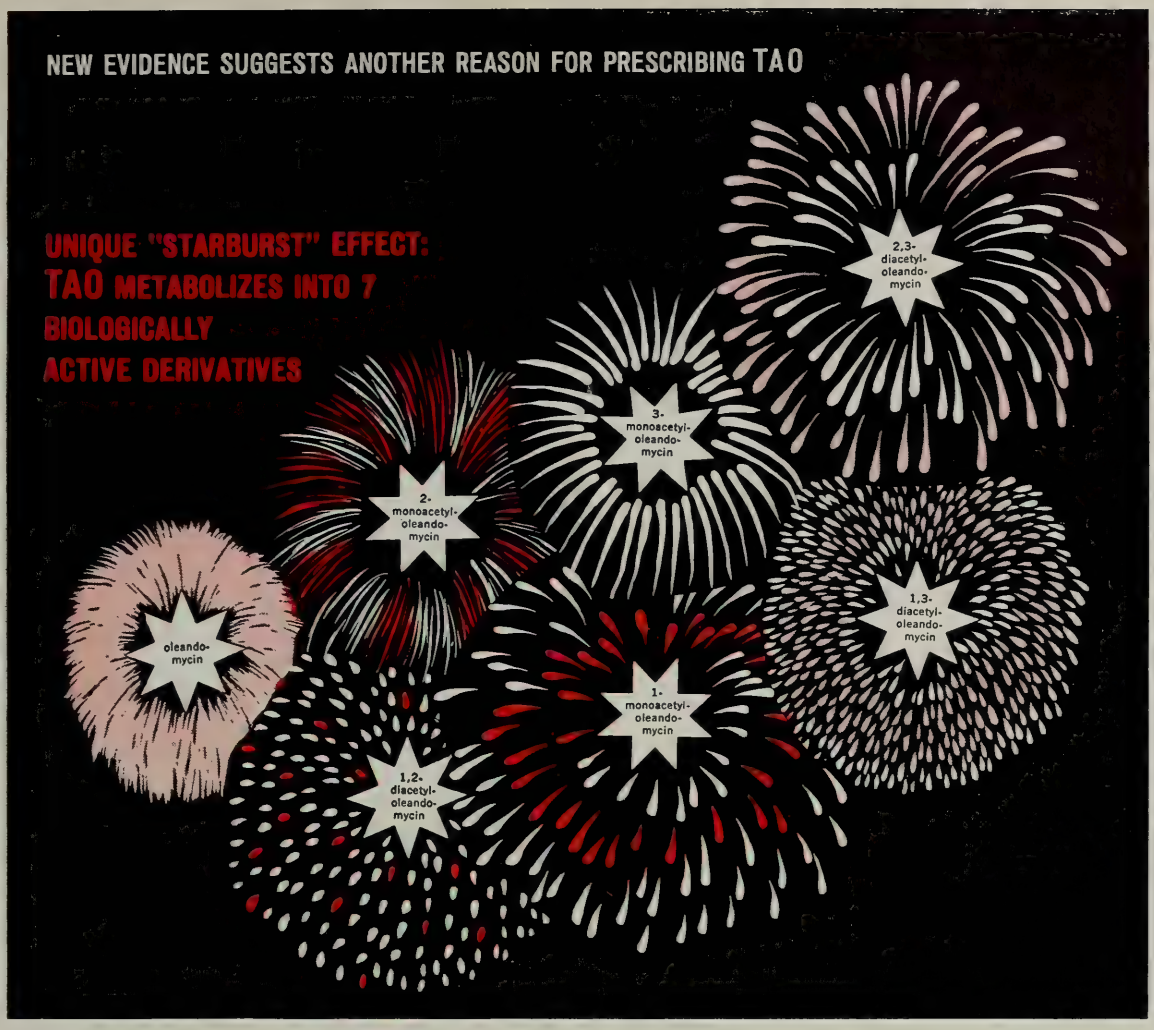
In an accompanying editorial, Dr. John H. Talbott, editor of the *Journal*, said: "Prior to 1955 a stamp of approval was required for each product advertised in American Medical Association scientific publications. The abandonment of the stamp of

(Continued on Page 108)

NEW ADVERTISING INDEX

California Medicine Index of Advertisers now lists not only the manufacturers' names, but also a page number for each product or service. We hope that this will make your journal more useful and convenient.

THE ADVERTISING DEPARTMENT



The impression that TAO is an unusually active antibiotic has steadily gained recognition by impressive clinical performance. Now come reports of **in vivo** and **in vitro** biological and biochemical evaluations that show TAO to be indeed unique.[1,2]

TAO differs from other antibiotics in that it is metabolized to multiple active compounds which **remain** active throughout their presence in the body. These 7 derivatives (in addition to TAO) show activity against common Gram-positive pathogens, including resistant strains of **Staph. aureus.**

In light of these findings, take another look at TAO performance: • 92% success in published cases of Gram-positive respiratory, skin, soft tissue and genitourinary infection • Effective against 78% of 64 "antibiotic-resistant" epidemic staphylococci. (In the same study, chloramphenicol was active against 52%; erythromycin against only 25%)[3] • No side effects in 94%; infrequent reactions mild and easily reversed • Quickly absorbed • Highly palatable.

Sound reasons to: Start with TAO to end 9 out of 10 common Gram-positive infections.

Supplied: TAO Capsules—250 mg., and 125 mg., bottles of 60. **TAO for Oral Suspension**—125 mg. per tsp. (5 cc.) when reconstituted; unusually palatable cherry flavor; 60 cc. bottle. Prescription only.

Other TAO forms available: TAO Pediatric Drops: flavorful, easy to administer. **TAO®-AC:** TAO analgesic, antihistaminic compound. **TAOMID®:** TAO with triple sulfas. **Intramuscular or Intravenous:** in clinical emergencies. Prescription only.

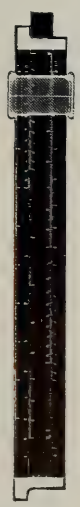
1. English, A. R., and McBride, T. J.: Proc. Soc. Exper. Biol. & Med. **100**:880 (Apr.) 1959. 2. Celmer, W. D.: Antibiotics Annual 1958-1959, New York, Medical Encyclopedia, Inc., 1959, p. 277. 3. English, A. R., and Fink, F. C.: Antibiotics & Chemother. 8:420 (Aug.) 1958.

designed for superior control of common Gram-positive infections

TAO®

(triacetyloleandomycin)

Capsules/Oral Suspension



Roerig

New York 17, N. Y.
Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-Being

Ocular Manifestations of the Chronic Renal Tubular Insufficiency Syndromes*

It is now possible to explain the association of certain conspicuous types of ocular disorder with insufficient renal tubular reabsorption. Three such disorders are Lowe's cerebro-ocular syndrome (congenital or early infantile cataract with hydrophthalmos), pseudohypoparathyroidism, and Fanconi's syndrome (vitamin D-refractory rickets with other extensive metabolic disturbances). A case of Lowe's syndrome in a boy baby 3 months old is described with emphasis on the ocular and urinary findings. Pseudohypoparathyroidism was observed in a man aged 39 who had always been confined either to his home or to an institution because of profound mental and physical deficiencies including progressive impairment of vision. In Fanconi's syndrome (not illustrated) cysteine crystals appear in the conjunctiva and cornea. These disorders are readily understood when it is considered that renal tubular reabsorption concerns the phosphates, amino acids, and basic elements. They are important to the ophthalmologist because the characteristic findings enable him to contribute valuable diagnostic information to the internist and others concerned in the treatment of these severe derangements of metabolism. Exact diagnosis is essential not only for effective treatment but also for counselling families in which these derangements occur.

Specialist Condemns Rash of Open Chest Heart Massage

The increasing use of open chest heart massage was criticized by a New York physician.

"The rash of thoracotomies [chest incisions] occurring in emergency rooms, medical wards, and even ambulances must be condemned," Dr. Vincent J. Collins of New York University-Bellevue Medical Center wrote in the February 6 *Journal of the American Medical Association.*

". . . thoughtless thoracotomies are being performed without due consideration of the principles [of cardiac resuscitation and massage] and in the face of inadequate assistance and equipment," he said.

Dr. Collins, a specialist in anesthesiology, stressed that adequate personnel with the proper skill and equipment, including someone with surgical skill and knowledge of the technique of heart massage, must be present.

This extraordinary measure, he said, should not be taken when heart collapse is precipitated by disease. Even in the operating room, where all skills are available and there is usually a preconceived plan of action, the incidence of successful resuscitation is "nil" in cases in which there is pre-existing cardiac disease, he said.

Suggestions that laymen be taught the fundamentals of cardiac resuscitation and massage, he added, ignore the fact that the success of the technique depends upon an understanding of the restoration of the entire oxygen system.

Dr. Collins commented on cardiac resuscitation in discussing deaths during anesthesia and surgery.

He said "numerous reports of cardiac arrest in recent years leave the impression that fatalities from the conduct of anesthesia and surgery are on the increase."

However, he said, the lack of specific definition and terminology relating to operating room deaths and of uniformity in compiling statistics make the problem difficult to assess.

A committee appointed by the A.M.A. House of Delegates currently is developing a classification of, and terminology for, hospital deaths due directly to anesthesia and/or operation.

"Nevertheless, the over-all operating room mortality can be placed at 1 in 1,000 to 1 in 2,000 operations," he said.

"If one reviews the available statistical reports one may further conclude that about one-third of the deaths may arbitrarily be attributed to anesthesia. Thus a rough incidence of anesthesia-related deaths is 1 in 3,000 to 5,000 anesthesias."

The importance of medical causes of death is increasing because of the frequency of medico-legal and professional criticism, he said.

"Such criticism is often based on the too ready assumption that every death occurring under anesthesia is caused by anesthesia or the anesthetist, in the absence of an obvious catastrophic event . . ."

He urged that every death under anesthesia be followed by postmortem examination as regularly as are other deaths occurring due to accidental or unknown causes or under suspicious circumstances.

A.M.A. Clarifies Advertising Acceptance Standards

(Continued from Page 106)

approval did not mean abandonment of the critical review of advertising copy submitted.

"Rigid standards for acceptance have been maintained, and editing of even modest claims has been customary. From time to time, the Advertising Committee has called upon qualified medical consultants to assist them in evaluating the merits of advertised products and the accuracy of the claims made."

In commenting on the standards, Dr. F. J. L. Blasingame, executive vice-president of the association, said, "This clarification comes as a result of discussion with medical and lay persons in the pharmaceutical industry.

"It is hoped that these standards will best serve the interests of medicine, and will place the American Medical Association, and its publications, in a position of leadership in the establishment of the ethics of pharmaceutical advertising."

*Abstract from A.M.A. Arch. Ophth., 62:188-195, Aug. 1959, Harold F. Falls.



At the recommended antiallergic and anti-inflammatory dosage levels, ARISTOCORT means:

- **freedom from salt and water retention**
- **virtual freedom from potassium depletion**
- **negligible calcium depletion**
- **euphoria and depression rare**
- **no voracious appetite — no excessive weight gain**
- **low incidence of peptic ulcer**
- **low incidence of osteoporosis with compression fracture**

Precautions: With ARISTOCORT all traditional precautions to corticosteroid therapy should be observed. Dosage should always be carefully adjusted to the smallest amount which will suppress symptoms.

After patients have been on steroids for prolonged periods, discontinuance must be carried out gradually over a period of as much as several weeks.

Supplied: 1 mg. scored tablets (yellow); 2 mg. scored tablets (pink); 4 mg. scored tablets (white); 16 mg. scored tablets (white).

Diacetate Parenteral (for intra-articular and intrasynovial injection). Vials of 5 cc. (25 mg./cc.).

References: 1. Feinberg, S. M.; Feinberg, A. R., and Fisherman, E. W.: *J.A.M.A.* 167:58 (May 3) 1958. 2. Epstein, J. I., and Sherwood, H.: *Conn. Med.* 22:822 (Dec.) 1958. 3. Friedlaender, S., and Friedlaender, A. S.: *Antibiotic Med. & Clin. Ther.* 5:315 (May) 1958. 4. Segal, M. S., and Duvenci, J.: *Bull. Tufts N.E. Medical Center* 4:71 (April-June) 1958. 5. Segal, M. S.: Report to the A.M.A. Council on Drugs, *J.A.M.A.* 169:1063 (March 7) 1958. 6. Hartung, E. F.: *J. Florida Acad. Gen. Practice* 8:18, 1957. 7. Rein, C. R.; Fleischwager, R., and Rosenthal, A. L.: *J.A.M.A.* 165: 1821 (Dec. 7) 1957. 8. McGavack, T. H.: *Clin. Med.* (June) 1959. 9. Freyberg, R. H.; Berntsen, C. A., and Hellman, L.: *Arthritis & Rheumatism* 1:215 (June) 1958. 10. Hartung, E. F.: *J.A.M.A.* 167:973 (June 21) 1958. 11. Zuckner, J.; Ramsey, R. H.; Caciolo, C., and Gantner, G. E.: *Ann. Rheumat. Dis.* 17:398 (Dec.) 1958. 12. Appel, B.; Tye, M. J., and Leibsohn, E.: *Antibiotic Med. & Clin. Ther.* 5:716 (Dec.) 1958. 13. Kalz, F.: *Canad. M.A.J.* 79:400 (Sept.) 1958. 14. Mullins, J. F., and Wilson, C. J.: *Texas J. Med.* 54:648 (Sept.) 1958. 15. Shelley, W. B.; Harun, J. S., and Pillsbury, D. M.: *J.A.M.A.* 167:959 (June 21) 1958. 16. DuBois, E. L.: *J.A.M.A.* 167:1590 (July 26) 1958. 17. McGavack, T. H.; Kao, K. T.; Leake, D. A.; Bauer, H. G., and Berger, H. E.: *Am. J. M. Sc.* 236:720 (Dec.) 1958. 18. Council on Drugs: *J.A.M.A.* 169:257 (January) 1959.

Lederle LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, N. Y.

A.M.A. Embarks on Major Study Of Medical Care Costs

A "Commission on the Cost of Medical Care," to delve into every phase of medicine where cost or spending is involved, was announced by the American Medical Association in February. An initial grant of $100,000 was appropriated to launch the study.

"This study-project is being undertaken," said Dr. Louis M. Orr, Orlando, Fla., president of the American Medical Association, "because the American public is spending increasing amounts of money for all types of medical care. These expenditures involve the peoples' lives, health, and pocketbooks. We would like to find where economies may be achieved in the best interests of the patient. The commission will analyze the cost picture from every angle and try to come up with some sound advice and suggestions."

The commission, whose members will be announced shortly, will serve as a "little Hoover Commission" to study all medical care costs, including doctors' fees, hospital charges, nursing cost, drug expenditures, and health insurance premiums.

Dr. Orr said that American medicine is "tackling the cost problem in order to help people better meet their obligations when illness strikes, and to help clarify the confusion that exists relative to such cost."

The American Medical Association, Dr. Orr said, is "well aware that more physician-patient relationships have been strained by a misunderstanding about fees than perhaps any other disagreement. Is such misunderstanding due to lack of frank discussion between doctor and patient, or is there some other reason? A patient has every right to know why he needs treatment or surgery, what it will consist of, and what it will cost—particularly where major services are rendered."

It is hoped, Dr. Orr added, that the study will also provide some sound advice for the consumer on how to get the most benefit from his health dollar.

In conducting this study, the A.M.A. commission will consult economists, health insurers, prepayment plans, hospital representatives, a cross section of patients, and others whose knowledge and opinions will be helpful.

Members of the commission will be announced shortly, and it is expected to be functioning this spring.

FORMULA FOR VI-PENTA

VI-PENTA NO. 1: Vitamin K analog (Synkayvite®), 1 mg.; Vitamin E, 5 mg.; Vitamin C, 25 mg.

VI-PENTA NO. 2: Vitamin A (Synthetic), 5000 U.S.P. Units; Vitamin D, 1000 U.S.P. Units; Vitamin C, 50 mg.; Vitamin E, 2 mg.

VI-PENTA NO. 3: Vitamin A (Synthetic), 5000 U.S.P. Units; Vitamin D, 1000 U.S.P. Units; Thiamine HCl (B_1), 1 mg.; Riboflavin-5'-phosphate sodium (B_2), 1 mg.; Pyridoxine HCl (B_6), 1 mg.; d-Panthenol, 10 mg.; Niacinamide, 10 mg.; Ascorbic acid (C), 50 mg.; d-Biotin, 30 mg.; Vitamin E, 2 mg.

"Approved"

PROFESSIONAL LIABILITY INDIVIDUAL INSURANCE

by

*"The No. 1 Malpractice Insurer"**

*MEDICAL ECONOMICS, FEB. 3, 1958

Unparalleled Experience • Specialized Service • Saving in Cost

THE MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Professional Protection Exclusively since 1899

SAN FRANCISCO OFFICE: G. C. Jones, Rep.
San Rafael, 23 Delwood Court, Tel. Glenwood 3-5140

LOS ANGELES OFFICE: A. R. Quilhot and G. G. Curry, Reps.
Arcadia, Room 109, 101½ E. Huntington Drive, Tel. Murray 1-5077
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relieves both stiffness and pain with safety... sustained effect

In 100 consecutive patients with the low back syndrome, Kestler[1] reported that particularly gratifying was the ability of SOMA "to relax muscular spasm, relieve pain, and restore normal movement, thus speeding recovery in a large majority of the patients."

RESULTS WITH SOMA IN THE LOW BACK SYNDROME*



*Investigators' reports to the Medical Department, Wallace Laboratories. (Total of 278 cases)

NOTABLE SAFETY—extremely low toxicity; no known contraindications; side effects are rare; drowsiness may occur, usually at higher dosage

RAPID ACTION—starts to act quickly **SUSTAINED EFFECT**—relief lasts up to 6 hours

EASY TO USE—usual adult dosage is one 350 mg. tablet 3 times daily and at bedtime

SUPPLIED—as white, coated 350 mg. tablets, bottles of 50; also available for pediatric use: 250 mg., orange capsules, bottles of 50

SOMA T. M.

(carisoprodol Wallace)

1. Kestler, O: In The Pharmacology and Clinical Usefulness of Carisoprodol. Wayne State University Press, Detroit, 1959. 2. Berger, F. M.; Kletzkin, M.; Ludwig, B. J.; Margolin, S., and Powell, L. S.: J. Pharm. Exp. Ther. *127*:66 (Sept.) 1959. 3. Spears, C. E. and Phelps, W. M.: Arch. Pediat. *76*:287 (July) 1959. 4. Phelps, W. M.: Arch. Pediat. *76*:243 (June) 1959. 5. Friedman, A. P.; Frankel, K., and Fransway, R. L.: Papers presented at Scientific Meeting, New York State Society of Industrial Medicine, Inc. ,New York, Sept. 30, 1959. 6. Kuge, T.: Unpublished reports. 7. Ostrowski, J. P.: Orthopedics (In Press).

Literature and samples on request

Also available on request: The Pharmacology and Clinical Usefulness of Carisoprodol, Wayne State University Press, Detroit, 1959. (185 pages)

WALLACE LABORATORIES, New Brunswick, New Jersey

Ulcer Not Rare in Youth; Often Unnoticed for Years

Junior could get a peptic stomach ulcer before his "old man." And if his father does develop the ailment, it may have started in his youth.

These are the conclusions of three Chicago physicians reported in a recent *American Medical Association Journal of Diseases of Children.*

"Despite its relative infrequency, peptic ulcer in children should not be considered rare," they said.

"The true incidence of peptic ulcer in children cannot be evaluated on the basis of the recorded cases, since these undoubtedly represent a small fraction of the total number of children with the disease. In many cases, symptoms are entirely lacking and the condition is identified only at operation or autopsy."

Drs. Alberto Ramirez Ramos, Joseph B. Kirsner, and Walter L. Palmer of the University of Chicago department of medicine cited studies showing that out of 1,000 adult patients with duodenal ulcer, 26 of them had symptoms traceable as far back as four years of age, and out of 1,000 with gastric ulcer, 16 had symptoms that dated from childhood.

From their own experience with 32 cases of peptic ulcer in children up to age 15, observed from 1936 to 1958, they concluded that:

—Chronic peptic ulcer in children is more frequent in males than in females at all ages.

—Symptoms of peptic ulcer are vague in children until the age of puberty when they begin to resemble those of adults.

—Duodenal ulcers exceed gastric ulcers.

—Chronic peptic ulcer in children is more frequent than acute ulceration and often remains unrecognized for long periods.

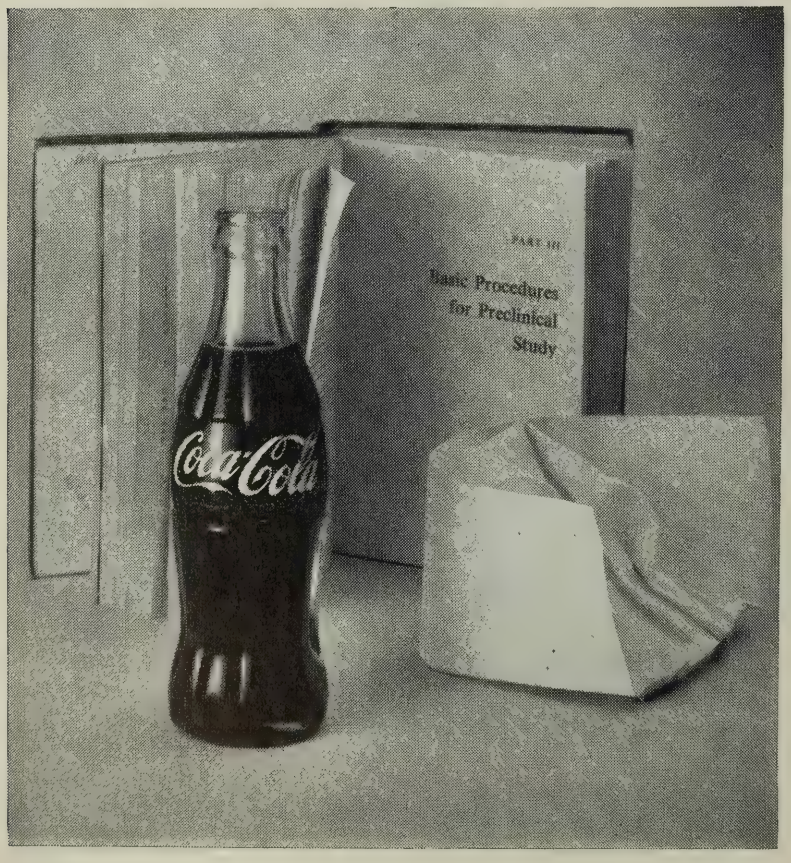
—Medical management with avoidance of gastrointestinal irritants in food and medication, frequent antacids, and sedation, is effective in the majority of children with peptic ulcer.

—As in the adult, surgical management may be necessary in childhood peptic ulcer complicated by hemorrhage or perforation.

The cause of peptic ulcer in children remains as obscure as its occurrence in adults, the researchers noted.

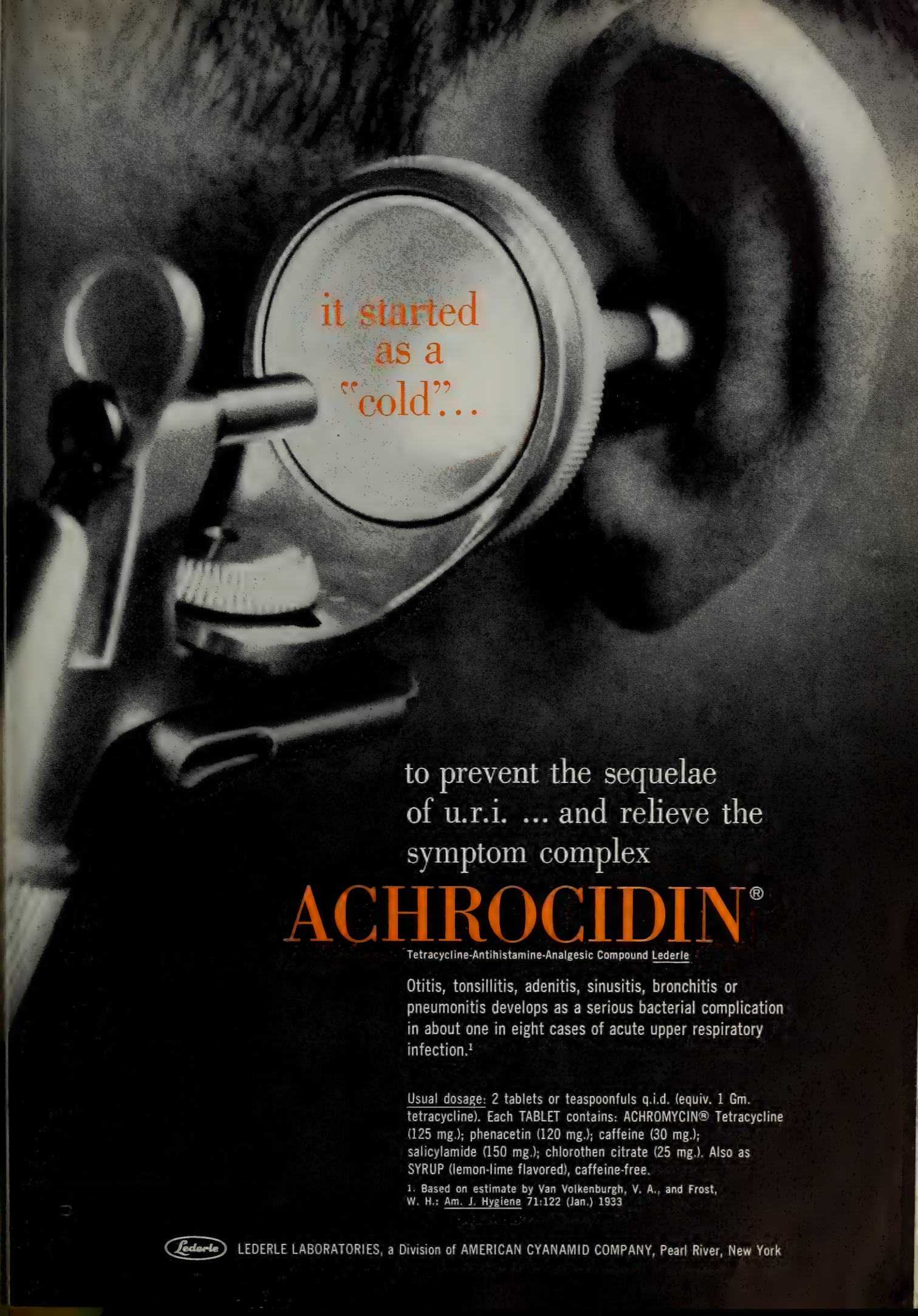
However, in the four cases of acute peptic ulceration among the 32 patients, cerebral damage and certain drugs may have been implicated as causative factors, they said.

Two patients, aged six and seven, developed acute peptic ulceration following a month's treatment with corticotropin, salicylates, and aspirin for rheumatic fever. But it could not be determined whether the drugs produced the ulcers, or irritated a susceptibility to ulcer, or whether rheumatic fever predisposed to peptic ulceration.



When too many tasks
seem to crowd
the unyielding hours,
a welcome
"pause that refreshes"
with ice-cold Coca-Cola
often puts things
into manageable order.

DRINK
Coca-Cola
REG. U.S. PAT. OFF.



to prevent the sequelae of u.r.i. ... and relieve the symptom complex

ACHROCIDIN®

Tetracycline-Antihistamine-Analgesic Compound Lederle

Otitis, tonsillitis, adenitis, sinusitis, bronchitis or pneumonitis develops as a serious bacterial complication in about one in eight cases of acute upper respiratory infection.[1]

Usual dosage: 2 tablets or teaspoonfuls q.i.d. (equiv. 1 Gm. tetracycline). Each TABLET contains: ACHROMYCIN® Tetracycline (125 mg.); phenacetin (120 mg.); caffeine (30 mg.); salicylamide (150 mg.); chlorothen citrate (25 mg.). Also as SYRUP (lemon-lime flavored), caffeine-free.

1. Based on estimate by Van Volkenburgh, V. A., and Frost, W. H.: Am. J. Hygiene 71:122 (Jan.) 1933

Lederle LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

A.M.A. Says Health Plan For Aged Is Too Costly

In a sharply-worded editorial, the January 23 *Journal of the American Medical Association* lashed out against legislation proposing a federal compulsory health insurance program.

It referred specifically to legislation, introduced by Rep. Aime Forand (D.-R.I.), which would amend the Social Security Act by providing hospital, nursing home, and surgical services for persons eligible for old age and survivors benefits. Eligibility age limits now are 65 for men and 62 for women.

"The Forand bill is a costly, irreversible program tailored to avoid the real problem," the editorial said, adding: "It is a fundamental deviation from the basic concept of the social security system which provides cash benefits, not services. It injects the federal government into the physician-patient-hospital relationship. Its enactment would be followed by control of the health care of the aged by the Social Security Administration.

"The strongest objection, however, to this kind of legislation is that it is unnecessary and would lower the quality of care rendered. Great progress is being made through voluntary enterprise supplemented by governmental programs that do not so-

(Continued on Page 58)

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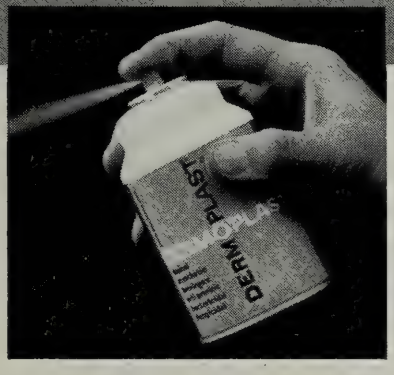
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A.M.A. Says Health Plan For Aged Is Too Costly

(Continued from Page 56)

cialize the health professions. Voluntary prepayment plans and health insurance have made phenomenal advances during recent years. Already 43 per cent of those aged over 65 years are covered by some kind of insurance, and it is predicted that by the end of 1960, about 60 per cent of those over 65 who wish to purchase such insurance will be covered. Social security cash benefits, private pension plans, increasing savings, and liquid assets are all combining to improve steadily the economic resources and purchasing power of the group over 65."

"It is obvious," the *Journal* editorial continued, "that whatever problem exists is among the needy and near-needy aged who would be rapidly reduced to a state of destitution by prolonged illness. In recognition of this fact the Boards of Trustees of the American Medical Association and the American Hospital Association recently adopted a resolution dedicating their full resources to accelerate the development of adequately-financed health care programs for needy persons, especially the aged needy. Both organizations stated that 'the indigent or near indigent is primarily a community responsibility.' The resolution pointed out that the Forand bill fails to meet the need of the indigent aged since the vast majority of such aged are not eligible to receive social security benefits.

"Medical-care programs for indigent citizens, especially those over 65, are improving. A new psychological climate for the aging is being created that promotes their productive utilization in society. New hospital designs more suitable and more economical for the care of the ambulatory aged, homemaker services, home-care services, improved nursing homes, and other positive action programs are proceeding at a rapid pace. Thus, voluntary and governmental enterprise that preserve individual responsibility and free choice have teamed up in recent years and are moving rapidly to resolve whatever problems still remain.

"It will always be possible to do a better job, but the one development which would apply a brake to all of these progressively developing movements would be Forand-type legislation. To bureaucratize medical care by funneling its services through the social security system would supply a 'cure' that would be worse than the disease in its ultimate effects on individual freedom and a free society."

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Thinning Hair in Young Women Does Not Lead to Baldness

Young women whose hair suddenly begins to fall out need have no fear they will be left looking like actor Yul Brynner.

Drs. William B. Guy and Walter F. Edmundson of Pittsburgh, writing in the February *Archives of Dermatology* published by the American Medical Association, said the condition is most likely temporary and can be treated successfully.

They said diffuse cyclic hair loss in women is "rather common" and is entirely different from permanent hair thinning that occasionally occurs in women in middle or late life.

"It occurs in transitory episodes, lasting for several weeks usually," they said. "The typical patient is a vigorous otherwise healthy woman.

"Needless to say, the emotional overtones in this situation are great. Some men take the state of their hair seriously. Practically all women do.

"It is the source of much perplexity because there is no apparent cause.

"It is probably a physiologic phenomenon. In these people a significant per cent of hairs enter the resting phase simultaneously. When they fall out in a short period of time, the situation causes alarm."

The authors said the hair that falls out usually is replaced by new hair growth. They said they had been able to arrest the process by administering corticosteroid hormones.

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California MEDICINE

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The Neurologic Aspects of Vertigo

Analysis of 400 Cases

DONALD MACRAE, *M.D.*, San Francisco

• **Of almost 8,000 patients referred for neurological consultation, 6.1 per cent had "dizziness" as a presenting complaint. Dizziness is a nonspecific complaint, used loosely to describe funny feelings in the head or lightheadedness by anxious or depressed patients; or it may mean vertigo—a hallucination of movement of self or surroundings in horizontal, rotatory or vertical direction. An analysis of 400 cases showed the complaint "dizziness" to be functional in about 25 per cent of patients. The cause in the remaining cases varied from epilepsy from cortical lesions, to lesion of the brain stem, such as tumors, vascular insufficiency, and multiple sclerosis, or to the peripheral neurone from Meniere's disease, and vestibular neuritis.**

Leading the patient out in a description of the kind of dizziness he feels may give clues that will help differentiate between true vertigo and functional disorder, particularly when considered against the information that is obtained in neurological examination.

THE ART OF MEDICINE, primarily concerned with clinical diagnosis, is of necessity preoccupied with symptoms of deranged function. The symptom *vertigo* demands attention not only because of its disruptiveness, but also because of its high clinical incidence. Thus, the 400 consecutive cases being here considered constituted an incidence of 6.1 per cent, as they were observed in the examination of almost 8,000 patients referred for neurological consultation. The series represents but a small proportion of all neurological cases in which vertigo is present; it consists of patients with a presenting complaint of dizziness or giddiness or a preliminary diagnosis of vertigo.

Of the galaxy of symptoms there is—with the exception of pain—probably no symptom personally experienced by so many physicians as vertigo—uncommonly from a pathological process, but commonly from unphysiological stimulation by motion while on the seas, in the air or on the merry-go-round, or by alcohol.

By derivation the term *vertigo* implies an hallucination of rotation of self or surroundings. In clinical neurology the term is used more comprehensively to include the descriptions of the sensations experienced by patients who have vertigo due to organic lesions of the vestibular apparatus resulting in dysequilibrium: An hallucination of movement of self or surroundings in horizontal, rotatory or vertical directions, varying in severity. Thus, a patient may be thrown to the ground on one occasion, while at another time have only a vague feeling of unsteadiness or uncertainty of movement, difficult to express

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Presented before the Section on Psychiatry and Neurology at the 89th Annual Session of the California Medical Association, Los Angeles, February 21 to 24, 1960.

in words. Some of these mildest forms may be dismissed as psychogenic, although readily accepted when seen as the end stage, lasting at times many days, of a severe attack of vertigo. The vertigo may be paroxysmal, chronic, postural or positional; or a single attack or several attacks may occur over many years.

Jongkees[9] said that vertigo was due to unphysiological stimulation of the vestibular organ. By experiments with subjects in a swing that was moved back and forth horizontally, he found that the direction of the acceleration given to the swing and of the acceleration of gravity form a parallelogram of accelerations with calculable direction; and normal subjects oscillated on the swing invariably confirmed this by their sensations. Thus, theoretically, if the subject is swinging head first, he will feel that he is tilting backwards, and, in fact, this is the sensation he does perceive. Vice versa, when the swing is moving feet first, he feels that he is tilting forward. It should be possible to place a normal person on the horizontal swing in such a position and subject him to such force, that the direction finds the "blind spot" of the labyrinth—that is, the position in which no otolith is in contact with its layer. This is found to be true in practice, the subject retaining no sensation at all of his position in space, despite intact proprioceptive and skin reflexes; and so, the movement is not perceived.

Vertigo is an impression in consciousness, not of actual movement, but an upset of the normal dynamic relationship existing between the body or the head and space, the vestibular mechanism being the proprioceptive organ for the head-neck positioning. As is well known, it has been demonstrated experimentally that this mechanism, along with the proprioceptors of the muscles, joints and spine, is reflexly capable of enabling the animal which has undergone a transection of the brain stem above the level of the red nuclei to adopt a normal posture and then, when displaced from that posture, to return to it by means of the righting reflexes. Physiological overstimulation of this mechanism, as occurs in acceleration or deceleration in certain planes or caloric stimulation, results in vertigo as do disease processes which disturb function. In the absence of such excessive stimuli or disorders, there is no impression in consciousness of the orientation of the body in space.

Vertigo may, however, occur when this orderly orientation is disturbed by an illusion of movement of space, as occurs when one is sitting in a stationary train and the nearby stationary train moves, or by an apparent disturbance of oneself with regard to space. As Hughlings Jackson[8] pointed out, the simplest form of vertigo is that which is produced by paralysis of an ocular muscle. This is primarily due to the faulty projection of the visual field of the affected eye, as a result of which the patient is presented with two visual spaces, the vestibular apparatus having the task of orientating the head in relation to each of its two proper but conflicting fields.

While the vestibular apparatus is sufficient to maintain posture unaided by vision or consciousness, both of these play important roles. Without vision one's extracorporeal space is very limited and righting reflexes can act unhampered. When the vestibular apparatus is damaged, vision may, and does, enable posture to be maintained; but with a normal vestibular mechanism, the wider the horizon and the greater the depth of space, the more difficult is the problem of orientation. Here, vision poses problems for the vestibular apparatus, rather than aids it. This is what appears to happen in the vertigo on a precipice or high platform. Does it play a part in psychogenic vertigo? Here, the vertigo characteristically occurs in the open. Meeting a person in a wide field may present a real problem with difficulty in maintaining equilibrium, as though vision was bringing into consciousness problems of illusion in spatial orientation to which the vestibular apparatus had to adjust.

PRESENT STUDY

Viewed against this background and after careful neurological and otological study, including audiometric and caloric examination, these 400 cases in the present series were considered to consist of:

Organic Vertigo	No. of Cases
Epilepsy	15
Posterior fossa lesions	52
Vestibular neuronitis	32
Miscellaneous peripheral causes	122
Traumatic	5
Undiagnosed	35
Total	261

Not Organic Vertigo	No. of Cases
Psychogenic	106
Epilepsy	29
Parkinson's disease	4
Total	139

CORTICAL VERTIGO

Vertigo and Epilepsy

Forty-four of the patients were diagnosed as having epilepsy. Twenty-nine of these, although referred with a diagnosis of vertigo, were found not to have organic vertigo. They had brief confusional episodes, partial loss of consciousness, or petit mal, while one had Stokes-Adams attacks from cardiac asystole. They had all described their attacks as

dizziness, but analysis of the history revealed the true condition, confirmed by neurological examination or by electroencephalography or response to anticonvulsive medication. In the case of the patient with Stokes-Adams syndrome, however, the condition was not diagnosed as such until he had an attack during a neurological examination, the asystole then being recognized.

Fifteen of these patients, however, had true vertigo, but again analysis revealed other aurae or subsequent loss of consciousness. Thus, a male aged 32 years complained of a hallucination of rotation of surroundings of two or three minutes' duration, at times preceded by paresthesiae in the fingers of the right hand and at times accompanied by vomiting. Loss of consciousness occasionally followed. On examination, he showed a mild aphasia, a partial right homonymous hemianopia and a mild right facial weakness. X-ray examination of the skull revealed a piece of shrapnel in the left posterior temporal area.

Symonds[13] expressed the opinion that vertigo was of no localizing value in cerebral tumors, and all the evidence supports this view in the presence of elevated intracranial pressure. Vertigo as an aura is not uncommon, occurring, in the experience of Gowers,[6] in 18 per cent of all cases of epilepsy. Exclusive of the present study, 50 cases of epilepsy with vertigo as an aura had features supportive of temporal lobe involvement—for example, commonly accepted temporal lobe aurae, focal electroencephalographic changes, dilatation of one temporal horn on pneumoencephalography, or even calcification observed roentgenographically.

Moreover, in one series of 100 cases of temporal lobe epilepsy, 31 of the patients had vertigo as an aura. Penfield,[12] during operations, was able to elicit vertigo by stimulation of the first temporal convolution. This suggests that an aura of vertigo (in the absence of raised intracranial pressure) usually indicates a discharge in the temporal lobe.

CENTRAL VERTIGO

Table 1 gives the incidence of posterior fossa lesions presenting with vertigo.

In 12 of the cases of vascular lesions, a diagnosis was arrived at only after one to four years' observation. The patients had attacks of vertigo varying in duration from 30 seconds to six or seven days with varying frequency, but without focal signs until the final, severe vertigo and vomiting immediately preceded a "stroke" with signs indicative of a brain stem lesion. In the other 12 cases these signs were present when the patients were first seen. The vertigo in these 24 patients was the presenting symptom in vertebro-basilar artery insufficiency or thrombosis.

TABLE 1.—*Incidence of Posterior Fossa Lesions Associated with Vertigo*

Posterior Fossa Lesions	No. of Cases
Brain stem vascular	24
Multiple sclerosis	16
Tumors	9
Hydrocephalus	1
Meningovascular lues	1
Olivo-ponto cerebellar syndrome	1
Vestibular neuronitis	32
Total	84

The tumors included one acoustic neuroma, two pontine gliomas, one brain stem astrocytoma and five cerebellar tumors. Only one, the brain stem astrocytoma, presented a diagnostic problem; in the other cases there were localizing signs and a progressive history. The patient with brain stem astrocytoma, a boy aged 16 years, first noticed that, on looking up when playing games, he invariably became violently dizzy—so much so that he would not assume that posture even for medical examination. The only neurological sign was a mild weakness of the right palate, but x-ray examination of the skull revealed calcification in the posterior fossa, proved at operation to be an astrocytoma. This case may be considered as an example of positional vertigo of the central type, first described by Lindsay.[10]

Edwards and Paterson[4] in their review of 157 cases of acoustic neuroma reported vertigo as the initial symptom in 18 per cent, but they concluded that when vertigo and deafness were not associated with nystagmus, with cerebellar incoordination or with impairment of corneal or facial sensation, it was unlikely to be due to an acoustic neuroma.

That vertigo may occur from a selective neuropathic effect on the vestibular neurone by streptomycin is well recognized. Dix and Hallpike,[3] when they defined a separate clinical entity, *vestibular neuronitis*, suggested that similar damage might occur from other toxic and unknown causes. Vestibular neuronitis is characterized by paroxysmal or even long-lasting (three to four weeks) vertigo with normal hearing on audiometric examination but a manifestation of canal paresis or paralysis on caloric testing. In a few of the patients who had this condition, the caloric abnormality later returned to normal. In several patients with vestibular neuronitis, the vertigo was the first and only manifestation of multiple sclerosis. In the present series, 16 cases of vertigo were due to multiple sclerosis, and in three of them vertigo was the first evidence of disease. The incidence of vertigo in acute multiple sclerosis is high and the sensation may be severe and prolonged. It has the same value in terms of

deciding on the multiplicity of lesions as the more commonly accepted symptom, diplopia.

Each of the five patients with traumatic vertigo had had a significant head injury with loss of consciousness, but without evidence of neurological lesions. In each, vertigo was of a positional type—that is, only with the head in a certain position in bed or at work did the vertigo occur. In two, an automobile mechanic and an engineer, it started only when they inspected automobiles or machinery from below, with the head tilted to the right. In each patient, nystagmus and vertigo occurred about five seconds after he was put in the critical position, then would disappear after 10 to 30 seconds (even though the position might be maintained). Dix and Hallpike[3] considered the lesion in such cases to be in the otolith. Nylén[11] expressed the opinion that when a particular position produces nystagmus and the direction of oscillation is not changed by changes of the position of the head, the lesion is peripheral; and when it is of a position-changing type, the direction of oscillation depending on the position of the head, the lesion is in the posterior fossa.

The four patients with Parkinson's disease in the present series were referred because of problems of dizziness, the extrapyramidal rigidity having gone unrecognized, as it often does when not suspected. None of them had true vertigo. On analysis, the problem was one of tending to lose balance in turns or on standing up or sitting down, and a feeling of insecurity when walking. It is of course possible for vertigo to occur when the underlying pathologic change affects the vestibular mechanism; but this was not the cause in these four cases.

PSYCHIC VERTIGO

The 106 patients with dizziness that was labelled "psychogenic" did not have true vertigo, although it is to be admitted that when vertigo is very mild, as it may be in a patient recovering from a brain stem lesion, the remaining complaint of a vague feeling of unsteadiness would be difficult to accept on its own as true vertigo. Moreover, as vertigo is very disturbing, it is not infrequent for patients to have a reaction of anxiety or depression, or even of hysterical elaboration, secondary to the organic vertigo.

In all of these patients, results of otologic, audiometric, caloric and neurologic examinations were within normal limits and there was evidence of anxiety, depression, hypochondriasis and other such emotional disturbances. In some the dizziness formed part of a mild injury syndrome with headache, and all showed pain and tenderness and some degree of spasm of the posterior cervical muscles. It may be suggested that tension receptors in these muscles, which form part of the head- and neck-righting mechanism, being affected by spasm, bombard the central vestibular mechanisms with afferent stimuli, and true vertigo results. Such a view is, however, not supported by the patient's description of the ensuing dizziness—a description which differs from the customary definition, being: "I fear I am going to fall"; "I feel pulled over to people when I am walking"; "I feel pulled over when I am out in the open and am afraid I am going to fall"; "I have a feeling of lightheadedness." In the majority, the problem was one of use of words—using "dizziness" to describe lightheadedness or a tight feeling in the head. In the others, there was a fear of open spaces or crowds, because of the ensuing sensation of dysequilibrium—a disturbance of the relationship of the individual to space, of an illusory character.

Although in the present series responses to caloric tests were normal, Hallpike and co-workers[7] reported that when caloric tests were quantitatively employed, in general neurotic patients were observed to have greater sensitivity than had other patients.

PERIPHERAL VERTIGO

Peripheral vertigo as observed in 122 patients was of three types:

1. *Spontaneous.* Eighty-two patients had spontaneous paroxysmal vertigo lasting from a few minutes to four hours, accompanied as a rule by nausea and vomiting, blurring of vision, tinnitus, distortion of hearing and exacerbation of tinnitus and deafness. Audiometry showed unilateral or bilateral perceptive deafness of varying degrees and loudness recruitment, while caloric responses showed some abnormality. Neurological signs were not present. Spontaneous paroxysmal vertigo of this type fitted the category of Meniere's disease, well described by Cawthorne[2] and many others.[14]

2. *Positional.* Twenty-six patients described vertigo in certain positions only—for example, with either the right or left ear down, the dizziness lasting only a few seconds and disappearing when the position was maintained. Rotatory nystagmus toward the involved ear was present for periods of from 5 to 30 seconds when the patient was placed in the critical position. Audiometry and caloric responses were normal. This disorder was self-limiting, lasting usually several months to a maximum of three years. Positional vertigo and nystagmus of this kind is well described by Dix and Hallpike.[3]

3. *From Destructive Lesions.* Fourteen patients had destructive lesions of the vestibular apparatus, most commonly otitis media with ample clinical evidence of local pathologic change.

Despite careful, comprehensive examination, no diagnosis was made in 35 patients although they gave a history of spontaneous vertigo of varying duration, at times recurring over months to five years. There is a tendency to attach labels, such as Meniere's syndrome, or even pseudo-Meniere's syndrome to such cases, but it appears preferable to resist attaching a label that might prevent an accurate diagnosis at a later date.

DIAGNOSIS

Encouraging the patient to describe the complaint of dizziness allows the first major separation of vertigo into the groups, organic and psychiatric. Some patients, particularly in the psychiatric group, resist such invitations, saying, "I am just dizzy"; but patience and the offering of alternative descriptions enable them to illustrate the complaint. This procedure helps in diagnosing epilepsy, whether or not accompanied by vertigo. It is only rarely that severe paroxysmal vertigo results in syncopal loss of consciousness, and when it does, consciousness is rapidly regained when the patient falls, even though vertigo may still persist.

Differentiation between central and peripheral vertigo is generally easy, but at times difficult. The presence of cochlear symptoms usually indicates a peripheral cause, except in cases of nerve lesions, as in acoustic neuroma. Observation of a minor neurological sign, such as absence of corneal reflex, or major signs of brain stem involvement settles the issue, as it does with many other neurological lesions. Pathological diagnosis is then established by further special neurological diagnostic procedures.

A familiarity with the natural history of Meniere's disease and positional vertigo usually makes recognition fairly easy; but it may be necessary to employ both otologic and neurologic diagnostic procedures to come to a definitive diagnosis, or to recognize that, although the vertigo appears organic, the cause is not ascertainable.

The age of onset is of little value, although, speaking in general terms, in the present series vertigo occurred in vascular diseases chiefly in the fifth and sixth decades, in Meniere's disease in the third, fourth and fifth decades, in vestibular neuronitis and multiple sclerosis in the second and third decades.

Except that positional vertigo appeared most frequently in females, there was no essential difference in sex incidence.

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Aortic Stenosis

Surgical Treatment Under Direct Vision, Using the Heart-Lung Machine

JEROME HAROLD KAY, *M.D.*, ROBERT M. ANDERSON, *M.D.*, and PAULINO TOLENTINO, *M.D.*, Los Angeles

• **Cardiac operation with the operative field under direct vision and the patient's oxygenation maintained by a heart-lung machine affords an excellent means of treating aortic stenosis, for it allows unlimited time in which to repair aortic stenosis no matter how involved the cusps are with calcium. The valves can be sculptured and the commissures cut at their place of fusion. Concomitant aortic insufficiency can also be taken care of at the same time, as can associated mitral valve stenosis and insufficiency.**

This method was used in ten patients. Two died. Eight were considerably improved.

VARIOUS METHODS for the surgical correction of aortic stenosis have been suggested since Tuffier[10] first described his method of aortic commissurotomy in 1913. In 1956 Bailey and co-workers[1] reported their experiences with aortic commissurotomy, first by passing a dilator retrograde through the carotid artery into the stenotic aortic valve and then by using the transventricular approach to the valve. Both techniques were abandoned for the transaortic route utilizing a pouch made of either preserved pericardial homograft or plastic cloth sewed on the ascending aorta. This "blind" technique (carried out without the surgeon's being able to see the lesion), consisted of passing a finger into the pouch and on into the aorta with an attempt to dilate the stenotic valve. In the last two years, many papers on aortic commissurotomy by this closed technique have been published. In 1959, Harken and co-workers[4] still advocated transaortic valvuloplasty using an operating tunnel made of the plastic material Ivalon®. And as recently as 1958, Glover and Gadboys[3] recommended transventricular aortic commissurotomy.

The visual repair of aortic stenosis under hypothermia was reported experimentally by Kaiser, Gaertner and Kay[5] in 1956. A report on the first ten patients operated upon by this technique was made by Kay, Anderson and Sheinkopf[6] in 1958. Work along the same line was also being performed by Lewis, Shumway, Niazi and Benjamin[7] in 1956 and Swan, Wilkinson and Blount[9] in 1958. Lillehei, DeWall, Gott and Varco[8] were the first to report on correction of aortic stenosis under direct vision, using the heart-lung machine. More recently, Bailey, Musser and Morse[2] reported on valvuloplasty with their "sculpturing" technique in cases of aortic stenosis.

The following is a report on the first ten consecutive patients with aortic stenosis operated upon with use of the Kay-Anderson heart-lung machine. The patients had rheumatic as well as congenital aortic stenosis and in two patients there was severe calcification of all cusps, necessitating use of "sculpturing" technique. The calcium was 1 to 1½ cm. thick on these cusps and before the sculpturing was carried out the cusps were immobile.

The age range of the ten patients was from 2 to 50 years. Five of the cases were congenital and five of the acquired type. The clinical symptoms of all patients showed a definite progressive course. The main symptoms were shortness of breath, pain in the chest, easy fatigability, dizzy spells and syncope. Two patients were in heart failure before the operation. All but one of the patients received digitalis before operation; the exception was digitalized immediately after the procedure. Preoperative left heart catheterization was performed in seven of the patients. The studies showed significant aortic stenosis, with gradients across the aortic valve as high as 120 mm. of mercury. X-ray films of the heart and cardiac studies showed left ventricular hypertrophy in all patients. Planigrams, made in six cases, showed varying calcification of the aortic valve up to the maximum of grade IV. Electrocardiogram patterns were all consistent with left ventricular hypertrophy and strain; and, in three cases, with left auricular enlargement also.

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TECHNIQUE OF OPERATION

A median sternotomy incision was used in all patients except the first, who had a bilateral anterior thoracotomy through the fourth intercostal space. The pericardium was opened in a longitudinal direction anteriorly. In order to prevent cardiac tamponade postoperatively and collection of blood in the mediastinum, the right edge of the pericardium was opened in a posterior direction and left wide open at the end of the procedure. This permitted blood to drain into the right pleural space and to be removed by tubes in the right side of the chest. The patient was given 3 mg. of heparin per kilogram of body weight and total body perfusion of blood was used in all cases. The venous blood was drained from the superior and inferior venae cavae and oxygenated blood was returned to the patient into the aorta through the right femoral artery. A second catheter was inserted into the left superficial femoral artery and on into the aorta for measuring pressure. During cardiopulmonary by-pass it was necessary to clamp the aorta just proximal to the innominate artery. A longitudinal incision was then made on the side of the aorta between the area of the aortic valve and the previously placed clamp on the aorta. Under direct vision the aortic valve was then repaired by removing the calcium from the cusps and performing aortic commissurotomy. In one patient, moderately severe aortic insufficiency was corrected at this time; and, in another, mitral commissurotomy was performed under direct vision following the aortic commissurotomy. The longest duration of cardiopulmonary by-pass was 149 minutes and the shortest was 35 minutes. Intermittent coronary perfusion was achieved by removing the aortic cross-clamp and tangentially excluding the aortic incision with a clamp, thus permitting perfusion of the coronary arteries. The longest total intermittent occlusion time of the aorta was 63 minutes and 30 seconds, but the average time of total occlusion of the aorta was 20 to 35 minutes.

RESULTS

Diagnostic data and results of operation are shown in Table 1.

The following are reports on two of the more interesting patients. One patient was a 48-year-old man with combined severe aortic stenosis and moderately severe aortic insufficiency. There was a Grade IV calcification of the aortic cusps (grading ranging from I to IV, with IV the most severe). Calcium 1.5 cm. thick on all the cusps was the cause of stenosis, and insufficiency was due to the immobility of the cusps. The infundibulum of the left ventricle for a distance of 4 cm. from the aortic valve was also calcified. By "sculpturing," the calcium was removed from the dorsum of all the aortic cusps. Although this corrected the stenosis, there was still moderate insufficiency. There was a good right coronary cusp but the left coronary and the noncoronary cusps were small and did not meet in the midline. These cusps were sutured together in the midline and a piece of Ivalon® sponge 2.5 cm. long, 1 cm. wide, and 3 mm. thick was attached over these two joined cusps in such a fashion that a portion of the sponge protruded past the cusps into the midline, where it overlapped the right coronary cusps. This procedure corrected the aortic insufficiency also. The duration of cardiopulmonary by-pass was 1 hour and 49 minutes. Postoperatively tracheotomy was done because of tracheobronchial secretions. The patient did well thereafter.

The second patient was a 50-year-old man with combined aortic and mitral stenosis. X-ray films of the chest showed left ventricular and atrial enlargement and planigrams demonstrated Grade III calcification of the aortic and of the mitral valve. A gra-

TABLE 1.—*Data on Diagnosis and Results of Direct Vision Operation with Use of Heart-Lung Machine*

Date of Operation	Age in Years	Diagnosis	Left Heart Cath. Aortic Gradient (in mm. Mercury)	Planigram	Result
Sept. 22, 1958	47	Rheumatic: Aortic stenosis	60	Not done	Good
March 5, 1959	2	Congenital: Aortic stenosis, endocardial fibroelastosis	Not done	Not done	Died
April 1, 1959	2	Congenital: Aortic stenosis	55	Not done	Good
June 9, 1959	41	Rheumatic: Aortic stenosis	40	Grade I	Good
May, 1959, Israel	16	Congenital: Aortic stenosis	Not done	No calcification	Good
May, 1959, Israel	38	Rheumatic: Aortic stenosis	Not done	No calcification	Good
July 21, 1959	48	Rheumatic: Aortic stenosis, aortic insufficiency	85	Grade IV	Good
July 28, 1959	50	Rheumatic: Aortic stenosis, mitral stenosis	55	III Aortic, III Mitral	Good
July 31, 1959	43	Rheumatic and Congenital: Subaortic stenosis, mitral insufficiency	90	None	Died
Aug. 7, 1959	16	Congenital: Aortic stenosis	120	Not done	Good

dient of 55 mm. of mercury across the aortic valve and 20 mm. across the mitral valve was demonstrated by left heart catheterization. At the time of operation the ascending aorta was opened and fusion with calcification of the right coronary and noncoronary cusps was noted. The left coronary cusp was also calcified. The aortic opening was 1 cm. in diameter. Valvuloplasty with "sculpturing" was done, the removal of calcium making the cusps mobile and increasing the aortic opening to 2 cm. The left atrium was opened and pronounced mitral stenosis was noted, opening in the mitral valve being 8 mm. in diameter. There was calcification of the anterolateral commissure but the posteromedial commissure was not affected. Commissurotomy was performed, the opening in the center of the mitral valve being increased to 3 cm. Cardiopulmonary bypass was maintained for 2 hours and 5 minutes. The postoperative course was uneventful.

Eight of the ten patients in the series were considerably improved by the operation. Two died. One of them was a two-year-old child with endocardial fibroelastosis and aortic stenosis. The aortic commissurotomy was done and the patient appeared to be doing well but as the chest was being closed ventricular tachycardia and fibrillation developed. It was impossible to restore normal beat despite all attempts, including returning to cardiopulmonary by-pass for two more hours. The other patient who died was a 43-year-old woman with subaortic stenosis caused by hypertrophy of the left ventricular muscle of the entire left ventricle. This resulted in obstruction of the outflow tract. The aortic valves were normal. The patient also had mitral insufficiency, which was treated at the time of operation. In removing the muscle mass causing the obstruction, the conduction system was injured and complete heart block ensued. Despite the use of an internal pacemaker and postoperative care, the blood pressure could not be maintained postoperatively and the patient died 24 hours after operation.

The method used in this series is far superior to the hypothermic method that was previously used by the authors. There would seem now to be no place for the "blind" methods of aortic commissurotomy either by the transventricular or transaortic route. It is of interest that during the period in which the ten patients in the present series were operated upon, another three patients who had been placed on the operative schedule died before operation. This would suggest the extreme hazard of this disease and the necessity for prompt operation once symptoms begin.

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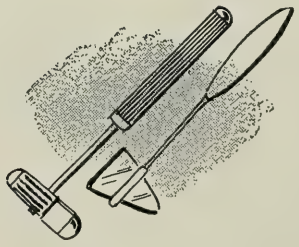
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Conization of the Cervix

Not an Innocuous Procedure

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COLD KNIFE CONIZATION and electroconization of the uterine cervix, although excellent procedures of proven value for treatment as well as diagnosis, entail risk of complications, both early and late. Cold knife conization, removing the squamocolumnar junction of the cervix for histopathological examination, is mandatory if a suspicious cervical lesion is seen or if the cervix appears normal but exudate contains suspicious cells. Electroconization is the treatment of choice for deep and persistent cervicitis, endocervicitis and erosion that has defied more conservative measures. Neither procedure, however, ought be done if superficial cauterization of the cervix, after taking specimens of exudate from the area for screening examination, will suffice; complications such as infection, stenosis and early and late postoperative hemorrhages occur rather frequently. Although hemorrhage is usually minor and transient, it can be of catastrophic proportions. Moreover, these complications can secondarily lead to dysmenorrhea, infertility, repeated abortions and premature labor.

The often serious and sometimes uncontrollable hemorrhage that Te Linde[7] mentioned as a possible sequel of cervical amputation by the Sturmdorf technic, can and does occur even with cold knife and electroconization of the cervix.

The blood supply of the cervix[3] comes from the cervical branches of the uterine vessels, the point of branching being at the level of the internal os near the crossing of the ureter. These cervical branches divide into three or four terminal branches which join across the anterior and posterior aspects of the cervix with the corresponding vessels of the opposite side. They thus form the coronary artery of the cervix.

To decrease the vascularity of the cervix before conization, I usually place two fairly deep sutures at the 3 o'clock and 9 o'clock positions just below the level of the internal os. Although I could not find a description of this technique in the literature, no originality is claimed for it; in discussions with my colleagues I have learned that a number of them are using similar suturing, especially before cold knife conization. Markley[1] described the use of a tourniquet applied to the cervix to provide a relatively bloodless field. Molumphy and co-workers[2] used a similar principle in their "tourniquet suture."

Often conization is done by the operating surgeon alone, especially when no house staff is available. Yet it would greatly facilitate the surgical procedure if an assistant were available to place and hold the retractors, thus exposing the cervix properly. Markley[1] in describing the use of a tourniquet emphasized that an assistant is needed.

Special instruments have been devised to facilitate the conization of the cervix—Seiger's cervitome[4] and Spencer's trachelotome,[6] among others. Seiger[5] also described the use of an oxytocic agent and calcium lactate to reduce the bleeding during as well as after the procedure. He also applied a special jelly* postoperatively to promote healing. Te Linde[7] mentioned the use of mucosa to cover the exposed stoma after amputation of the cervix, in the manner described by Sturmdorf, to decrease the tendency to stenosis or hemorrhage. Regardless of surgical technique or special instruments or medications used, conization of the cervix is sometimes followed by complications, some of which are serious, and should not be done unless specific indications for this type of procedure are present.

The very number and complexity of techniques for guarding against or dealing with complications of conization of the cervix are a tacit warning that the procedure is one to eschew unless specific indications make it necessary.

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Submitted January 6, 1960.

*Urea, 8.3%; Sodium propionate, 0.5%; Lactic acid, 0.33%; Zephiran, 0.5%; Methionine, 0.85%; Cystine, 0.85%; Inositol, 0.85%; Aquasol A and D, 2.0%; Methyl cellulose, 5.0%; Aqua, q.s.

Elbow and Wrist Injuries in Sports

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FRACTURES OF THE ELBOW AND WRIST often cause little deformity and swelling and therefore may not be suspected until improper healing has permanently impaired joint function. The disability may not interfere with ordinary work but it may limit the free painless motion necessary to sports and other strenuous activities. Therefore any disabling injury of these joints should have roentgen study to detect any fracture.

• Any disabling injury of the elbow or wrist should be studied roentgenographically for evidence of fracture which may not be otherwise evident but which may cause permanent disability unless the joint is immobilized for healing.

"Tennis elbow" may be treated with physical therapy and analgesic injection but may require splinting or tendon stripping. Elbow sprain can occur in the growing epiphysis but is rare in adults. A jarring fall on the hand may cause fracture or dislocation at the elbow.

Full extension of the joint should be restored gradually by active exercise rather than passive or forcible stretching.

Fracture at the head of the radius may cause joint hemorrhage with severe pain which can be relieved by aspiration. A displacing fracture at the head of the radius requires removal of the head to prevent arthritic changes. Myositis ossificans contraindicates operation until after it has cleared.

Healing of wrist fractures may be facilitated by exercise of the shoulder and elbow while the wrist is still in a cast. Fractures of the navicular bone are difficult to detect even roentgenographically and splinting may have to be done on clinical evidence alone.

THE ELBOW

The frequency of elbow injuries in athletics can be gauged from the experience at Columbia-Presbyterian Medical Center where, not counting dislocations, 21,000 fractures of the elbow were treated in 17 years—about one every three days.

The elbow is really not one joint but three, since the radius and the ulna are joined to each other and individually to the humerus. Not only flexion and extension but also pronation and supination are functions of the elbow, and impairment of these functions may greatly hamper the use of the hand. Such disability may develop in an athlete without any history of direct injury.

The most frequent cause of pain about this joint is the so-called "tennis elbow," which is most often due to lateral epicondylitis although the medial epicondyle may be similarly affected. The usual symptoms are pain over the condyle and weakness of grip. On examination tenderness may be localized to the epicondyle and the conjoined tendon and may be increased on resisted extension of the wrist because the extensor tendons to the wrist arise from the lateral condyle. Tight gripping places stress on the origin of the tendons which is the site of inflammation.

This inflammation may be treated with warm soaks, compresses, or whirlpool. Local injection of 1 per cent Xylocaine® and 1 cc. of hydrocortone® usually relieves symptoms. In a few intractable cases it may be necessary to splint the wrist in extension or even to strip the tendon from the condyle for permanent relief.

Calcium deposit about the elbow may sometimes cause similar symptoms and can be diagnosed roentgenographically. Essentially the same treatment is indicated.

The elbow may be injured either by a direct blow or by a jarring fall on the flat of the hand. The numerous important structures that pass by the elbow joint can be damaged by swelling or dislocation; therefore elevation, application of ice bags and the immobilization of severe injuries by splinting are important first-aid measures. Immediate rapid swelling about the elbow following an injury should alert an athlete's trainer or coach to the probability that a major vessel has been injured. Obliteration of the radial pulse signals a major emergency and the patient should be sent to a hospital.

Sprain of the elbow is a rare condition. It practically never occurs in children, in whom the growing epiphysis is weaker than the ligaments and more likely to be injured. In the college athlete, if roentgen films disclose no fracture and there is no evidence of a spontaneously reduced dislocation, sprain may sometimes be diagnosed. A few days' rest, soaks, whirlpool therapy and gradual return to full use are indicated.

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Dislocation of the elbow joint is a serious injury because of the trauma to the adjoining soft tissues and ligamentous structures. Usually there is gross deformity about the joint and pain on motion of the elbow; sometimes the patient may report that the elbow snapped out and back in, with severe pain following. Roentgen study may reveal fracture, most often of the coronoid process in a posterior dislocation. The dislocations should be reduced under general anesthesia as soon as possible, then the elbow immobilized in a posterior molded plaster splint from the axilla to the wrist for ten days, and thereafter supported in a sling for several weeks. Flexion, pronation and supination of the arm should be started early, but for three weeks extension beyond 150 degrees should not be permitted. If the coronoid process is fractured, the cast should be retained for two weeks and extension limited to 130 degrees for three weeks.

A typical fracture of the head of the radius—one of the most frequent of elbow fractures—occurs in a fall which the patient breaks with his outstretched arm. He may then note a slight pain in the elbow but may go on with no severe symptoms. Gradually in the next four to six hours severe pain develops with limitation of elbow motion, both due to bleeding from a fissure fracture of the head of the radius which fills the joint with blood. The joint may be distended, painful on any motion, tender directly over the head of the radius. Roentgenograms must be taken from several views to show the fracture.

Aspiration of the joint (under sterile conditions) gives immediate relief of pain. If there is no displacement the elbow should be immobilized for two to three days in a posterior mold, later protected by a sling for about a week while motion is resumed. If there is displacement, pain and limitation may occur immediately on injury, and the head of the radius must be removed to prevent early arthritic changes and loss of elbow motion. Removal of only the fractured segment is not advocated. Motion may be resumed about a week after operation.

The next most common elbow fracture of a severe nature in the mature athlete is the dicondylar fracture due to a direct fall on the elbow. The fragments are usually displaced and operative repair is necessary. Deformity and loss of motion often result.

Elbow injuries may cause myositis ossificans—proliferation of bone within the brachialis muscle overlying the joint. This is usually visible in roentgenograms two to three weeks after injury and tends to increase for several months but regresses spontaneously within six months. Any operation in the area is definitely contraindicated for 9 to 12 months following the onset of myositis ossificans. Sports, too, are contraindicated during this time, for vigorous motion stimulates bone formation as a reaction to trauma.

An error sometimes made by trainers in dealing with an elbow injury is to try to improve extension by passive stretching or by the lifting of heavy weights or by push-ups. These methods only delay healing. Active exercise, gentle heat and massage, whirlpool baths and ultrasound are better methods when used judiciously.

THE WRIST

The motion of the eight carpal bones joining the forearm to the metacarpals is poorly understood. In this region, as in the elbow, the impact of a fall may cause a fracture which at first is discernible only by roentgen study and which can lead to permanent impairment of function unless treated early.

The commonest wrist fracture, the distal radius, is usually reduced closed, then immobilized for four to eight weeks. An athlete should be able to recover full athletic function in two to four weeks. Full motion of the shoulder and fingers should be encouraged while the cast is on, then active wrist exercise and whirlpool therapy after removal of the cast.

The next most common fracture is that of the navicular bone. Since usually it causes little swelling or deformity, it is often mistaken for a sprain. Tenderness localized over the navicular bone should accentuate the suspicion of fracture, which may be confirmable only by multiple and special roentgen views. If confirmation is impossible, clinical findings may justify immobilization in a gauntlet cast for two to three weeks. After the cast is removed there may be roentgenographic evidence of reabsorption at the fracture line. Immobilization then should be resumed for a total of 12 to 16 weeks. Nonunion and aseptic necrosis, which are not rare, cause painful limitation of motion. These effects can best be prevented by early adequate immobilization.

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Psychosis and Systemic Lupus Erythematosus

A Review of the Literature and Case Reports

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• **In a review of the literature of the last 60 years concerning the association between psychosis and systemic lupus erythematosus, reports of 227 cases of this association were found. The average incidence of psychosis in the various series of systemic lupus erythematosus that were reviewed was 22 per cent. In only 25 per cent of the cases in which the information was given was the psychosis associated with steroid therapy.**

The psychiatric manifestations are variable and may be associated with a neurological disorder. Psychosis may antedate by many years other features of lupus. The psychosis due to lupus may respond to steroid therapy. Since systemic lupus erythematosus sometimes may be an important differential diagnosis of functional psychosis, appropriate diagnostic studies should be carried out in psychotic patients who have an accelerated sedimentation rate or positive serological test for syphilis without apparent reason.

INVOLVEMENT OF THE central nervous system by systemic lupus erythematosus (SLE) is more frequent than is commonly recognized. Because of the authors' research interest in psychosis as a presenting manifestation of SLE, the literature of the past 60 years was reviewed for case reports of severe psychiatric dysfunction associated with SLE.

A total of 227 cases of psychosis associated with SLE were found in the literature; 168 were in large series* and 59 in small series or individual case reports.† The highest reported incidence of psychosis accompanying SLE was 52 per cent (22 of 42 patients reported by Brody[4]); the lowest was 9 per cent (4 of 44 patients reported by Jessar and coworkers[30]). The mean incidence in the larger series was 22 per cent—psychosis in 143 of 664 cases of SLE. In Dubois'[18] series of 62 patients, psychosis occurred in 15 (29 per cent). Tumulty[51] reported 105 cases of SLE, in 20 of which major psychotic episodes had occurred. In Soffer, Ludeman and Brill's[50] series of 55 patients, 13 (24 per cent) showed psychiatric abnormalities. O'Connor[39] found that 22 (55 per cent) of 40 patients with SLE had had psychotic episodes during one or more hospitalizations; in addition, five had had neurotic symptoms. He saw a more severe form of SLE associated with pychosis. Clark and Bailey[13] found 17 of 100 patients to have had significant neuropsychiatric illness; four of them had had severe psychiatric dysfunction without a neurological disorder. Of 11 children reported by Zetterstrom and Berglund,[53] two had shown mental depression and paranoid reactions. Hill[27] found that 13 (27 per cent) of 49 patients had had psychotic features. Kushniruk's[31] study of 30 patients with chronic discoid lupus showed that two had had psychoses and two paranoid tendencies. McEwen[35] mentioned having seen 25 patients with coexistent psychoses and SLE.

Two difficulties were met in evaluating these reports. First, as to the cases reported before the description of the LE cell phenomenon in 1948,[24] one is not always quite sure that the diagnosis of SLE was correct. For example, Osler's[40] case is called the first record of psychosis associated with SLE; however, the clinical description of this patient probably would not today be considered to fit the diagnosis of SLE. On the other hand, the authors consider that in some of the 13 patients described by Bruetsch,‡ on the basis of autopsy findings, as having psychosis due to rheumatic brain disease, the psychosis was more probably a manifestation of SLE. Some of these 13 patients had been psychotic for many years and three also had epilepsy. All had chronic vascular lesions of the brain; most had a verrucous endocarditis, and many had scattered vascular lesions in such organs as the kidneys, spleen and liver. The second difficulty was to decide what recorded symptoms represent psychosis or a major departure from psychic normality. For instance, many case reports said that "mental confusion preceded death," but since mental confusion often occurs in dying persons, this alone should not be taken as evidence of psychosis. Also, of course, psychiatric criteria are not strictly comparable from report to report.

It is well known that psychosis can be precipitated by the use of steroids, which are frequently used to

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*References 4, 13, 25, 27, 30, 31, 35, 39, 50, 52, 53.

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‡References 6, 7, 8, 9, 10.

treat connective tissue diseases. However, these compounds are implicated in only a minority of the reported cases of psychosis associated with SLE. Information was given about steroid therapy in 97 of the 227 cases; and in only 27 of these 97 cases (25 per cent) had there been coincident steroid therapy. In only three of McEwen's[35] 25 cases was psychosis attributable to steroids. Moreover, many case reports of psychosis associated with SLE antedate the availability of steroids. Tumulty[51] said that central nervous system changes had been noted more frequently before the use of steroids.

The temporal relationship between the appearance of psychosis and the occurrence of other manifestations of the disease was variable. Those cases were striking in which the psychosis or severe psychiatric dysfunction antedated or occurred simultaneously with the onset of SLE. A patient was reported by Hanrahan[23] (Case 2) had had paranoid schizophrenia for eight years; one reported by Brunsting[11] (Case 2) had had compulsive guilt feelings for six years before the appearance of definite symptoms of SLE. Haserick[25] remarked on the fact that 11 (9 per cent) of his series of 126 patients with SLE had been under neuropsychiatric care long before organic manifestations were noted. In six cases,* covered in the present review, psychosis was separated by only a few weeks from the appearance of SLE.

Although most authors reported schizophrenic-like (particularly paranoid) or schizoaffective-like symptoms, the psychiatric manifestations described were varied. Dubois,[17] Brody[4] and Clark and Bailey[13] referred to organic psychosis of various types. Hill,[27] Clark and Yoss,[14] and Brunsting[11] found depression notable. Like Sabbath and Luce's[44] similar observation in the case of asthma, Brody[4] found that in 15 patients the onset of psychosis had been associated with a remission in other symptoms of the disease. He also noted that the earlier the psychosis appeared, the more favorable the effect on the physical symptoms. O'Connor[39] saw a more severe form of SLE associated with psychosis but noticed no evidence of an alternation between psychiatric and constitutional symptoms.

Neurological manifestations, whether or not associated with psychiatric abnormalities, are common in SLE. Russell, Haserick and Zucker[43] found that 22 (15 per cent) of the 144 patients reported in the literature as having SLE also had convulsions. They added a series of 28 patients with SLE, of whom seven (25 per cent) had had convulsions. In Dubois'[18] series of 62 patients, 23 (35 per cent) had had seizures. Clark and Bailey's[13] retrospective study of 100 patients seen at the Mayo Clinic showed 24 to have had significant neurological signs. Neurological symptoms may, like psychosis, antedate other features of SLE by many years.[48] The patient described by Hanrahan[23] (Case 3), and two patients described by Russell and co-workers[43] (Cases 1 and 2) had epilepsy for 11, 14 and 16 years, respectively, before definite symptoms of SLE. When SLE involves the central nervous system, the spinal fluid protein may be raised.[5,13,22,46] At times, especially when peripheral neuritis predominates, the spinal fluid protein may be elevated yet the cell content remain within normal limits.[22]

It is of interest that in Case 1 of Malamud and Savers[33] and in Case 2 of Hanrahan[23] positive reaction to serological tests for syphilis had been noted 13 and 8 years, respectively, before the appearance of SLE and had been noted in Hanrahan's case at the time of onset of schizophrenia. The presence of a positive Wassermann test reaction with the psychosis in Hanrahan's case is added evidence that the psychosis was caused by SLE and represented its earliest manifestation. It has been known for some years that many persons having positive reaction to serological tests for syphilis do not have syphilis at all. Moore and Mohr[38] expressed the opinion that at least 50 per cent of positive reactions in a mass survey were probably false positive results. Montgomery and McCreight[37] found 14 (44 per cent) of 32 patients with acute SLE but only four (17 per cent) of 23 patients with chronic SLE (by which they meant cutaneous disease with few, if any, constitutional symptoms) to have false positive reaction to tests for syphilis.

The amount of cerebral arteriolar or neuronal pathologic change found in many patients with psychoses and SLE is often very scant. Adequate pathological details were given in 20 cases reported in the literature. In seven (35 per cent) of the patients the pathological findings were insufficient to explain the mental abnormalities. In these cases, presumably the pathologist would have been unable to make the diagnosis of organic brain disease had the brain alone been available for examination.

The role of steroids and corticotropin (ACTH) in the treatment of psychosis associated with SLE is difficult to evaluate both because SLE is a disease which is characterized by spontaneous exacerbations and remissions, and because these drugs themselves are known to precipitate psychosis. Apparently, two forms of psychosis are associated with SLE, one a part of the disease itself and the other secondary to corticotropin or steroid therapy. That psychiatric illness emerges during steroid therapy does not prove the condition to be the result of such therapy; increasing the dosage should help in differentiation.

*References 1, 12 (Case 2), 33 (Case 1), 41, 46 (Case 5), 52 (Case 6).

The psychiatric manifestations of SLE itself are reported to respond often to steroid therapy;* whereas, the form secondary to steroid therapy would be expected to worsen with increased dosage.[11,28,32] All these difficulties account for the conflicting statements in the literature, which vary from Brody's[4] figure of 12 per cent improvement with treatment to Dubois'[18] statement of 95 per cent improvement with intensive steroid therapy.

The following cases of patients observed in recent years at Napa State Hospital further illustrate that psychosis may be the major manifestation of lupus and may antedate its other features by many years.

CASE 1. An unmarried woman 45 years of age was admitted in August 1942, with a history of irrational speech and acts, seclusiveness, vague delusions of persecution, exaggerated religious ideas and bouts of depression for a period of four weeks. There had been two previous episodes of depression, one at age 27 lasting two months and another at age 40 lasting 15 months.

Upon examination, anxiety and decreased motor activity were noted. The patient was inattentive, depressed, passively negativistic and had blocking of thought. She said she was guilty of "I don't know what." A diagnosis of manic depressive psychosis in the depressed phase was made.

By June 1943, she had improved spontaneously and was quiet and cooperative. She remained in the hospital because her relatives would not take her home. In February 1945, she was placed on leave and took outside domestic employment, but in May 1945, she returned to the hospital with depression. She had recurrent depressive episodes in the hospital, but after electroconvulsive therapy in 1951 she improved.

In early 1957, facial erythema developed, which waxed and waned subsequently. The rash lasted up to six weeks at a time, was never ulcerated and was associated with a fever of up to 102° F. There was no associated exacerbation of mental symptoms. A recent physical examination showed a diffuse erythema of the face in the butterfly distribution, with a small area of skin atrophy on the left cheek and a small amount of follicular plugging.

The urine, hemoglobin and total and differential leukocyte count have been always within normal limits. The sedimentation rate was 32 mm. in one hour in June 1958, and remained accelerated thereafter. LE cells were found in October 1957 and May 1958. The total serum protein content was 6.6 gm. per 100 ml. (albumin 4.1) in May 1958 and 6.4 gm. per 100 ml. (albumin 3.2 gm.) in March 1959. Thymol turbidity was 1 plus, cephalin flocculation 1 plus at 24 hours and 2 plus at 48 hours, and alkaline phosphatase reaction was 2.1 Bodansky units. The spinal fluid showed protein of 30 mg. per 100 cc., no cells and normal colloidal gold curve.

Administration of chloroquine, 250 mg. daily, begun in August 1958, brought about gradual improvement of the rash but no change in the mental condition.

CASE 2. The patient, a woman 40 years of age, was first admitted in September 1955 with a three-month history of depression and nihilistic ideas such as that her body was disintegrating. Her sensorium was intact. On admission, the diagnosis was schizophrenic reaction, schizoaffective type. The patient improved with a course of 18 electroconvulsive treatments and was placed on leave, to take a maintenance dosage of reserpine, in April 1957.

The patient did fairly well for about six months and then became rather apathetic and confused. On readmission in May 1958, she was poorly oriented, depressed, heard voices, and showed flat and inappropriate affect. Choroiditis in the right eye (the result of trauma as a child) was noted. No other abnormality was noted in the neurological and physical examination. Two days after admission, the patient had the first of many Jacksonian seizures, starting on the left side of the face and progressing to status epilepticus. Lumbar puncture showed spinal fluid pressure of 230 mm.; the chemical content of the fluid was normal, no cells were present and there was negative response to a serologic test for syphilis. The blood showed normal hemoglobin levels, leukocyte count varying from 4,500 to 10,000 per cu. mm. and sedimentation rate persistently around 25 mm. in one hour. The total serum protein was 5.1 gm. per 100 ml. (albumin 3.4 gm.). Thymol turbidity, alkaline phosphatase and fasting blood sugar were within normal limits. No abnormalities were noted in x-ray films of the skull. An electroencephalogram showed slowing, maximal in the frontal regions and right hemisphere. LE cells were present in specimens of blood.

Hydrocortisone was administered parenterally, then triamcinolone, aspirin, and chloroquine by mouth. The seizures ceased within 12 hours, the confusion cleared considerably and the general physical condition of the patient improved, although the schizophrenic symptoms persisted. Steroids were discontinued after 15 days, but chloroquine therapy was maintained. In September 1958, a course of 18 electroconvulsive treatments, instituted for persistently labile affect, brought some improvement. Later, however, the patient showed very poor adjustment, refusing all ward activities, and had conceptual disorganization and hallucinations.

*References 1, 3, 4, 17, 33, 41, 49.

Addendum:

The authors have undertaken a long-term study to determine how many patients in hospital because of psychosis have mental illness as an isolated manifestation of SLE. It is of some importance for therapeutic as well as theoretical reasons to establish this diagnosis. A large mental hospital population will be screened for the presence of lupus factor in the serum by means of the nucleoprotein latex test.[19] Patients with positive reaction to the tests will be studied further.

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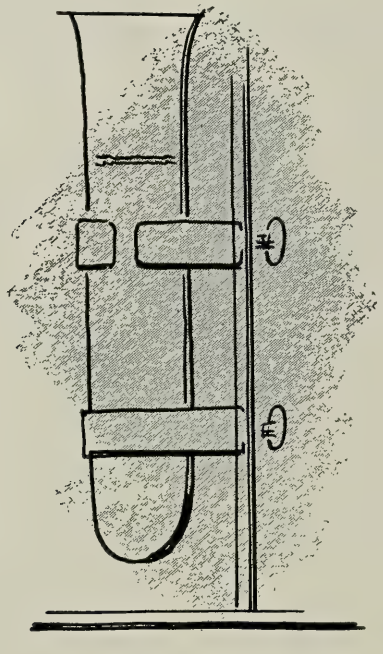
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Cystic Fibrosis

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• **To determine the actual number of deaths from cystic fibrosis reported in 1957 in California, all death certificates mentioning any one of the various terms used to describe the condition were reviewed.**

As a cause of death, cystic fibrosis is infrequently mentioned on death certificates. In 1957, only 42 of a total of 124,082 death certificates mentioned cystic fibrosis. Half of the deaths occurred in persons less than 12 months of age. There was no significant difference by sex between deaths due to cystic fibrosis and deaths from all causes. All deaths occurred in the white population.

IN RECENT YEARS, physicians have become increasingly aware of a disease—previously considered a rarity—which has been given a number of names, including *cystic fibrosis, pancreatic cystic fibrosis, fibrocystic disease of the pancreas* and *mucoviscidosis.* Until rather recently this condition had always been considered fatal, usually terminating in infancy or early childhood. Some physicians are still unaware of the prevalence of cystic fibrosis and of the fact that there are patients with this condition who are in their teens and early adulthood. Accurate information about the numbers of deaths due to cystic fibrosis is not readily available because of the way deaths from this cause are coded by the International Statistical Classification of Diseases, Injuries and Causes of Death. The incidence of cystic fibrosis has been variably reported at from 1 in 600 live births to about 1 in 10,000. Some observers believe that the estimates of incidence are low since the condition is frequently confused with more common respiratory and digestive ailments.

The number of deaths from cystic fibrosis has not been available from cause-of-death statistics classified according to the International Statistical Classification of Diseases. Before 1958, this condition was coded to either 756.2 (congenital malformations of the digestive system) or 587.2 (diseases of the pancreas). In the Seventh Revision of the International Statistical Classification of Diseases, this condition will be coded to 587.3 (cystic fibrosis, under diseases of the pancreas). This category has been added for use in the United States only.

According to three often-quoted estimates for the incidence of cystic fibrosis which are reported in the literature,[1] the number of cases among the 350,025 live births occurring in California in 1957 would be as follows:

Estimate	No. of Cases
1 per 600 live births	583
1 per 1,000 live births	350
1 per 10,000 live births	35

Sharples[3] said that the apparent incidence of cystic fibrosis of the pancreas approaches that of cerebral palsy and far exceeds that of childhood leukemia and nephrosis. She further said that the mortality rate associated with more prevalent diseases, such as rheumatic fever and poliomyelitis, is low in comparison with the mortality rate from cystic fibrosis, more than 50 per cent of patients with this disease dying before the age of five years. Schwachman[2] noted no greater incidence in one sex than in the other. Concerning racial incidence, a majority of patients are Caucasian, a few Negro. The condition has not been reported in oriental races.

Because there have been increasing expressions of opinion that cystic fibrosis is a much more common cause of death than was previously thought, a review was made of death certificates registered in California in 1957 to determine how frequently cystic fibrosis was certified as the cause of death or a condition associated with the cause of death. The following analysis is based upon all certificates mentioning cystic fibrosis of the pancreas. Birth certificates of the patients who died were also obtained if possible.

RESULTS OF REVIEW

In 1957 there were 42 deaths in California for which the certificate mentioned cystic fibrosis of the pancreas or another diagnosis considered synonymous. There were 124,082 deaths of persons of all ages and 8,681 infant deaths in California during that year. Table 1 lists the various terms used by physicians in completing the death certificates which have been considered for purposes of this study to be synonymous with the term cystic fibrosis of the pancreas.

Of the 42 deaths, 19 were classified as due to congenital malformations of the digestive system

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(International Statistical Classification 756.2) and 19 as due to diseases of the pancreas (I.S.C. 587.2). In the four remaining cases, two in which there was mention of lung involvement along with the pancreatic disease, were coded to 759.5, a code used in California for multiple congenital malformations. One of the other two deaths was ascribed to pneumonia with immaturity, and one to intestinal obstruction.

Data collected from the death certificates illustrate the fact that in 1957 children died at an earlier age from cystic fibrosis than from any of the other selected causes which were studied, for example, leukemia, muscular dystrophy, cerebral palsy, poliomyelitis, rheumatic fever, tuberculosis (Table 2). Data for the other selected causes of death represent the underlying cause of death as stated on the death certificate, the condition to which a code number was assigned according to the requirement of the International Statistical Classification of Diseases. Other death certificates may have mentioned one of these conditions, but not as the underlying cause of death and therefore were not counted. The 42 cases of cystic fibrosis reported here represent all the deaths for which cystic fibrosis was mentioned anywhere on the death certificate.

The sequence of conditions leading to death involved diseases of the respiratory system in the majority of cases. Pneumonia (including bronchial pneumonia and pneumonitis) was mentioned on 24 certificates, and bronchiectasis or bronchitis on six. Eight certificates listed diseases of the digestive tract, including five mentioning meconium ileus. Cor pulmonale was reported in three of the deaths, prematurity in three, and mongolism was mentioned once (Table 3).

Table 4 shows the age of the 42 patients at the time of death. Twenty were under one year of age, and six of these were under one month of age. Eight were in the 1 to 4 year age group, nine were in the 5 to 9 year group, three in the 10 to 14 year group, and two were 15 years of age or over. The oldest person to die was 27 years of age. For all of the age groups except one, death registered to cystic fibrosis of the pancreas represented 1 per cent or less of the total deaths in the age group. For the age group 5 to 9 years, death due to cystic fibrosis of the pancreas accounted for 1.3 per cent of the total deaths.

All the deaths under study were in persons of the white race, 25 males and 17 females. For the infants under one year in the group, the sex ratio closely approximated the sex ratio for all deaths in the under one year group. Diagnosis was confirmed by autopsy in 24 of the 42 cases.

In only four of the 42 deaths was the duration of the disease specifically stated on the certificate to be less than the age of the deceased. Fourteen of the death certificates did not supply any information as to duration of disease and in one case it was stated that the duration was unknown. In 24 cases the duration of the disease was specified as "a congenital malformation" or "lifelong."

The median age at death was 16 months. The median calculations for the entire group of 42 patients and for the "duration of disease not stated" group were based on the assumption that the disease was present from birth. In cases in which the duration of the disease was indicated on the death certificate, the median age at death was 12 months, where the duration was not mentioned, the median

TABLE 1.—*Terms Synonymous with Cystic Fibrosis Used by Physicians in Certifying Cause of Death*

	No. of Certificates
Fibrocystic disease of the pancreas	16
Congenital fibrocystic disease of the pancreas	1
Chronic fibrocystic disease of the pancreas	1
Fibrocystic disease of the pancreas with lack of pancreatic enzyme	1
Cystic fibrosis of the pancreas	13
Congenital cystic fibrosis of the pancreas	1
Chronic cystic fibrosis of the pancreas	1
Cystic fibrosis of the pancreas with endocrine disease	1
Cystic fibrosis	1
Pancreatic and adrenal cortical insufficiency	1
Congenital pancreatic cystic disease	1
Chronic cystic disease, pancreas	1
Mucoviscidosis (cystic fibrosis)	1
Pancreatic fibrosis of lungs	1
Fibrocystic disease	1
	42

TABLE 2.—*Deaths from Selected Causes, Under Age 15, California, 1957*

Age Group	Fibrocystic Disease of the Pancreas	Cerebral Palsy (351)*	Poliomyelitis (080)*	Muscular Dystrophy (744.1)*	Rheumatic Fever (400-402)*	Leukemia (204)*	Tuberculosis (001-019)*
All ages	42	30	22	42	44	961	905
Under 1	20	1	1	12	0	6	8
1 to 4	8	10	3	3	2	76	5
5 to 9	9	5	1	1	2	61	1
10 to 14	3	4	1	4	2	25	1
15 and over	2	10	16	22	38	793	890

*Numbers in Parentheses appearing in column headings are Sixth Revision International List Numbers.
Source: State of California, Department of Public Health, Death Records.

TABLE 3.—*Other Conditions Mentioned Singly or in Combination on Death Certificates Involving Fibrocystic Disease of the Pancreas, California, 1957*

(Note: One case of each unless otherwise indicated by numbers in parentheses.)

Diseases of the Respiratory System
- Bronchopneumonia (17)
- Pneumonia (5)
- Pneumonitis (2)
- Bronchiectasis (4)
- Bronchitis (2)
- Atelectasis (2)
- Respiratory
 - infection (2)
 - failure
 - insufficiency
- Pulmonary
 - fibrosis
 - cysts
 - hypertension
- Emphysema
- Abscessed lung
- Hyaline membrane disease of lung

Diseases of the Digestive System
- Meconium ileus (5)
- Atresia small bowel with perforation
- Intestinal obstruction
- Peritonitis from ruptured intestine

Heart Disease
- Cor pulmonale (3)
- Cardiac cirrhosis
- Cardiac failure

Congenital Malformations
- Mongolism

Diseases of the Genito-Urinary System
- Uterovesical obstruction

Prematurity (3)

Miscellaneous
- Anoxemia, cerebral
- Sepsis

was 22 months. The older ages, particularly the person who lived to be 27 years old, affected the calculation of the average duration of the disease and the average age of death so much that these calculations are not shown.

MATCHED BIRTH CERTIFICATE INFORMATION

Birth certificates were available for comparison of information with that on the death certificates in 37 of the 42 cases.

Four of the patients were born prematurely; this fact was reported on both certificates in only one instance, on the death certificate in two cases and on the birth certificate in one case. No additional premature infants were identified when birth weight and length of gestation information were reviewed. The average birth weight for the 31 infants having birth weights recorded was 6 pounds 11 ounces. Five of the birth certificates indicated some abnormal condition other than cystic fibrosis existing at the time of birth. These included club foot, mongolism, cleft palate, bowel atresia and meconium ileus.

TABLE 4.—*Deaths Involving Fibrocystic Disease of the Pancreas, by Age and Sex, Per Cent of Total Deaths, California, 1957*

Age Group	Deaths Involving Fibrocystic Disease of the Pancreas: Total	Male	Female	Per Cent of Total Deaths	Total Deaths
Total	42	25	17		124,082
Under 1 month	6	3	3	0.1	6,458
1 to 11 months	14	9	5	0.6	2,223
1 to 4 years	8	4	4	0.6	1,252
5 to 9 years	9	6	3	1.3	679
10 to 14 years	3	1	2	0.7	453
15 years and over	2	2			113,017

Source: State of California, Department of Public Health, Death Records.

State of California, Department of Public Health, 2151 Berkeley Way, Berkeley 4 (Montgomery).

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Addendum

Since this report was prepared, 1958 data for cystic fibrosis have become available, as shown in the table below.

Deaths from Cystic Fibrosis of the Pancreas (International Statistical Classification 587.3) By Age and Sex, California, 1958

Age	Total*	Male	Female
Total	44	25	19
Under 1	15	10	5
1 to 4	17	8	9
5 to 9	10	6	4
10 to 14	1	1	
15 to 19	1		1

*Total number of deaths from all causes, 125,594.

In addition, a description of the national cystic fibrosis situation is given in a report by Sirken and others in Public Health Reports, Volume 74, Number 9, September 1959. This is a report of a nationwide hospital sample survey, conducted between January 8 and February 13, 1959, in which information was obtained about hospital patients discharged with cystic fibrosis. The authors estimate that in the United States in 1957 about 2,500 patients were discharged from hospitals with a diagnosis of cystic fibrosis. Of these, 95 per cent were under 20 years of age. About 360, or 14 per cent of the patients were discharged by death.

Behavioral Characteristics of Dangerous Drivers

Importance of Correction

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• **Studies of accident-prone drivers emphasize the frequency of unstable, aggressive or antisocial personalities expressing themselves through the automobile as a real and a symbolic weapon. Such expressions may be voluntary or unconscious and may also lead a driver to injure himself or seek injury from others.**

Because of the great public danger from such drivers, it is urgent that judges and enforcers of the law recognize the psychic motivation in habitual violation and withhold driving privileges from violators until a psychic adjustment has been made. Physicians can contribute in gaining acceptance for this attitude of enforcement, and in setting up adequate psychiatric procedures for correction of violators.

ANY ACTIVITY that directly concerns life and safety is important to the physician; he may not hope to become expert on it, but a general knowledge may enable him at times to save life or prevent disability just as surely as by treatment with drugs or surgical operation. Automobile driving is becoming recognized as such an activity, with the driver's personality—particularly his personality defects—emerging as a crucial factor in the safety of the millions on our highways.

This recognition is far from understanding. Even the mechanical factors of automobile safety are still under experiment, and these combine with the variables of human judgment in moment-to-moment decisions on the highway. Nevertheless, just as the psychiatrist can only judge and direct a patient's general attitudes in adjusting to life, we should be able to discover what general attitudes are helpful or harmful in adjusting the driver to proper use of his machine in traffic.

REVIEW OF LITERATURE

Motor vehicle departments, highway patrols, universities and medical facilities all over the country are conducting complicated projects in an effort to understand the psychic variables of drivers.

In a project at the University of Colorado School of Medicine, these characteristics were noted in drivers who had had accidents:

"1. Less capacity for managing or controlling hostility.
2. Excessive self-centeredness and indifference to the rights of others.
3. Excessive preoccupation with fantasy satisfactions.
4. Fearfulness of loss of life and support and resentment toward persons responsible for depriving them.
5. Less ability to tolerate tension and a need for immediate discharge of their feelings."[2]

Tillman and Hobbs, in a six-year project in London, Ontario, found in drivers with records of frequent accidents, "intolerance, aggression against authority from early childhood, unstable home background, antisocial behavior, aggressiveness, impulsiveness, intolerance of social or family limitations on their behavior, immaturity, false bravery, no concern for others, domination by fatalistic ideas, hatred for authority, lacked an adequate philosophical outlook on life and failed in developing a method of living, essential for good behavior patterns." They concluded that the accident-prone subjects were "dominated by fatalistic ideas," largely concerned with the "material aspects of life, resentful of authority" and inclined to be their "own boss" and that these attitudes resulted in a predictable increase in accidents recorded over a six-year period.[7]

From the Harvard School of Public Health, Ross A. McFarland has presented a concept of multiple causation in accidents. His comprehensive triad, the "host" driver, the "agent" vehicle and the "environment," takes account of all the interacting factors in evaluating an accident. With regard to behavioral characteristics of the driver, he stated: "The basic human variables relate to attitudes that underlie the specific behaviors exhibited during driving—attitudes toward traffic, toward the presence of other drivers, toward vehicle laws and regulations, toward enforcement activities and toward society. Factors of attitude, personality and adjustment are of greater importance in safe driving than sensory defects, reaction times and psychomotor skills. . . . Various tests developed to predict accidents indicate

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that, so far, such procedures have only limited value."[4]

Schulzinger stated: "The main psychological elements that increase the probability of accidents in maladjusted persons are anxiety, fear, worry, guilt, hostility, emotional and psychosexual conflicts, early exposure to aggression, overauthoritative parents or parent figures, broken homes, frustration, inadequacies of youth, rejection and fatigue."[6]

The administration of a battery of tests to drivers who have had accidents has failed to shed any real and useful light on the driver-accident problem. The complex of alleged characteristics of accident-prone drivers in no way differs from the factors allegedly found in juvenile delinquency, senile dementia or many another psychiatric problem. Continuing the listing of descriptive behavior patterns will not necessarily contribute to our understanding of why drivers have accidents. However, it is important that these behavior patterns be understood and evaluated in terms of impairment of driving ability and accident-proneness.

The necessity for exercising clinical and practical judgment is important because pseudoscientific research projects conducted by unqualified persons have led to a great deal of confusion regarding the importance of various behavior traits. The emotional factors in a given driver cannot be placed in an experimental apparatus and recorded, so that the results can be publicized as factors in the causation of accidents. We must beware of the statistical trap and move into the area of understanding. The problem is far too complex for a simple definite solution. Woodward states, "The doctors need not wait until all the facts are at hand, we can begin the control of accidents in a clinical and practical way. We feel that we now have enough facts, which, if employed, would reduce the deaths and injuries 50 per cent or more."[8]

Fatalism in this field is unjustified; people can be changed, and therefore there is hope that the behavior of the driver can be changed.

ESSENTIAL EVALUATING FACTORS

It is necessary to have standards of judgment when an attempt is made to evaluate behavior characteristics. The essential evaluating factors include a person's philosophy of life. What a man thinks, says and does is an expression of his psychic makeup and reactions. A way of thinking that results in a feeling of belonging, of cooperation with mankind, conforming to accepted social behavior and consideration for the welfare of others, is essential to good driving. Clinical studies, psychiatric judgment and research data are in agreement that drivers with a high accident rate often come from broken homes, have been subjected to excessive aggression and authority, demonstrate antisocial behavior, reveal considerable emotional instability and have fewer and more superficial social contacts. In contrast, the driver with few accidents identifies himself with the family, belongs to social groups, relates favorably to his work and derives satisfactions from the way he lives. Another finding, if it can be accurately stated, is that safe driving depends on the satisfactions the driver is *capable* of deriving from living. If a person has a mature outlook on life, if he is favorably disposed toward society, if his social relationships are meaningful, his attitude and behavior will permit him to drive safely. Satisfactions in life and safe driving go hand in hand.

BEHAVIOR CHARACTERISTICS IN DRIVERS

The attitudes of the driver are based on negative or positive motivations. The driver with negative motivations feels that any kind of driving short of an accident "is satisfactory" or rates himself a good driver if he has a "no-accident" record. This negative attitude of avoiding an accident is hostile in nature, reveals self-centeredness and implies that the driver is so absorbed with his emotional problems that he is indifferent and inattentive to traffic conditions. These negatively motivated attitudes cause many drivers to become antagonistic and impulsive and lose a proper sense of caution. Drivers with positive motivations feel that safe driving is "the proper thing" to do, that it is morally wrong to violate traffic regulations even when there is no possibility of an accident. The positive motivations for safe driving are evidenced in the driver who feels he is "average" rather than in the one who considers himself the "best" or "below average" in driving behavior.[5]

The attitude of the driver is important and in the words of Woodward,[8] "Our duty as a citizen and physician is not fully discharged until preventive measures have become a fact and a program emphasizing the positive side of safe driving has become a reality."

Automobile drivers may have two types of emotionally motivated accidents; either they hit someone or someone hits them. Accidents are either deliberate or unintentional, consciously or unconsciously accomplished.

We are not yet in a position—nor anywhere near it—to demand psychometric evaluation of every driver. But as physicians we do come in contact with the psychically disturbed, potentially dangerous drivers, and as citizens we can press for psychiatrically enlightened handling of drivers whose accidents have already demonstrated that they are dangerous.

In any automobile accident there is a possibility

of unconscious motivation: the desire to hit someone or to be hit. It is impossible to offer any general explanation for such desires, for the causes may be different in each case. As in any other medical problem, however, the diagnosis cannot be made unless the possibility is recognized. Every automobile accident must be considered in this light; moreover, accident-prone drivers must be recognized as belonging to the same categories as those who in other ways show egocentricity, aggressiveness, antisocial attitudes, irresponsibility, rebellion and, often, low mentality. They should be considered sick.

A car in the hands of such a driver is as much a weapon as a gun or a club. It can be used, consciously or unconsciously, to kill, maim, mutilate, destroy, eliminate or declare war on an enemy, real or imaginary. It can be used also for suicide, which may be unconsciously designed and may be executed without conscious guilt—a socially acceptable method.

When the motivation of the driver is hostile, aggressive, resentful and retaliatory, he may well project feelings of anger onto other drivers, unconsciously precipitating an accident in order to create remorse in the subjects of his hate or the objects of his frustrated love. Therefore, an angry driver should not be permitted to drive again unless he improves his driving behavior. If he fails to do so, we should stop pampering him with the excuses of psychiatric handicaps and suspend his license.

On the other hand, many hostile, aggressive, resentful and retaliatory drivers do not have accidents because they are able to control, direct and discharge these feelings in some other manner. The utilization of judgment, cognition, reality orientation, ego control and toleration saves many an angry driver from having an accident.

PRACTICAL APPLICATIONS

Police officers, lawyers and judges must become aware of how their actions affect driving safety. Accidents may be triggered by resentment or frustration from inequitable or unreasonable restrictions; on the other hand, the potentially dangerous driver may be encouraged by indulgence either to himself or to others. The law should not have a sense of humor or tolerate egotistical disdain of others; it must recognize that murderers and traffic violators are equally dangerous. Enforcers, like violators, may be influenced by egocentric concepts of their own wisdom and knowledge, and so may become accessories to accidents, both before and after the fact.

An immediate need is a change in philosophy and attitude of legislators, motor vehicle administrators, law enforcement personnel and judges regarding the reality of the psychiatric aspects of accidents. Municipal Judge Sherman C. Finesilver of Denver advocated "a new philosophy in our courts." He expressed the belief the court experience should be remedial and assume the responsibility for improving driver behavior. "The courts should be a force for safety."[3]

Many courts have traffic violators' schools, and Detroit has a psychiatric clinic where driver behavior is evaluated. Of 812 offenders studied there, 244 were judged feebleminded, borderline or of inferior intelligence, 101 had emotionally unstable personalities, 18 had compulsive disorders, and 7 were in senile deterioration.[1] After a psychiatric evaluation has been made by the clinic, a course of action follows: "sick drivers" are given medical, psychiatric or driver-training treatment. Failure to respond results in permanent suspension of the license to drive. Some licenses are granted only with limitations similar to those imposed on the physically handicapped.

Such enforcement is needed not only as a deterrent to violation but as a positive sanction for obedience. Many citizens do not take a law seriously unless enforcement sets the trend. If every driver is aware that deviate behavior will have serious consequences for him, if every would-be reckless driver realizes that he cannot win, then the behavior on the highways may be drastically improved.

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The California Youth Authority Psychiatric Treatment Program

Its Historical Significance and Philosophy

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• **Three psychiatric treatment units for dealing with emotionally disturbed teen-age delinquents who become wards of the California Youth Authority are operating on a pilot basis in three of the Authority's corrective schools.**

It is recognized that treatment is far more than psychotherapy; the solicitude, encouragement, understanding and sympathy that a disturbed teen-ager receives from the people who make up his custodial surroundings are a part of it. An aim of the treatment units is to relieve these young people of disruptive, destructive emotions.

A most important aspect is the integration of treatment with custody, which requires—and is getting—the cooperation of the administrative staffs.

Although the cost of the program is relatively high, it can result in a considerable net saving to taxpayers. Helping to make an orderly, productive citizen of a disturbed youth can usually prevent years of costly custodial care.

FOR MANY YEARS the probem of dealing with emotionally disturbed teen-aged delinquents has confronted California courts, probation departments, the Youth Authority, Department of Mental Hygiene and many private agencies. Many different committees have been established through the years to study this problem, which in 1955 became so critical that judges in some of the larger counties communicated with members of the Legislature in order to get a legislative policy with regard to it.

Representatives of the California State Senate and Assembly met with representatives of the 11 western states under the auspices of the Council of State Governments and learned that the same serious problems exist in these states.

In the 1956 Census of Special Problem Cases, the Youth Authority reported that about 17 per cent of the persons admitted to the Youth Authority could be classified as "special problem delinquents" who, because of emotional disturbance, could not be expected to benefit from the existing correctional and rehabilitation program. Such wards of the state, although relatively few in number, create a tremendous impact. They occupy a kind of institutional "no man's land" since there appears to be no proper place for them in regular mental hospitals or in existing institutions for the mentally deficient. They require more efforts to rehabilitate and a greater amount of staff time. More important, many adult criminals come from among them. It is clear that psychiatric care and treatment is seriously needed for them.

At the 1956 legislative session the matter was referred to the Assembly Interim Committee on Social Welfare under the chairmanship of the Honorable Bruce F. Allen, Assemblyman. On June 22, 1956, this committee called together a group representing the courts, probation departments, the Department of Mental Hygiene, the Youth Authority and the Department of Corrections to discuss the problem. From the testimony given by all persons present it was decided that the Youth Authority should address itself to this problem. By resolution, the committee requested the Youth Authority to do the staff work necessary to meet the problem, including the drafting of legislation and the preparation of plans for appropriate buildings and staff at Youth Authority institutions.

An amendment to the Welfare and Institutions Code was passed by the 1957 Legislature which provides that the Youth Authority shall also accept "a person committed to it . . . if he is a borderline psychotic or borderline mentally deficient case, if he is a sex deviate unless he is of a type whose presence in the community under parole supervision would present a menace to the public welfare, or if he suffers from a primary behavior disorder."

In August of 1957 a development committee for Psychiatric Treatment Units was organized within the Youth Authority to develop the program. In the original proposal by the agency, Psychiatric Treatment Units were to be placed in each of the existing Youth Authority facilities. However, the Legislature, recognizing the vast extent of the problem, the lack of precedent and the problems involved in organization and procurement of buildings and professional

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personnel, was careful to authorize the establishment of the Psychiatric Treatment Units on a staggered basis providing sufficient time for the development of plans, procedures, and training. The units were initially authorized at Preston School of Industry and Los Guilucos School for Girls, with the third Psychiatric Treatment Unit to begin operation after July 1, 1959, at the Fred C. Nelles School for Boys.

Concepts of Treatment and Psychotherapy

Although all psychotherapy is treatment, all treatment is not psychotherapy. This distinction is of more than academic value. The warm-hearted solicitude, encouragement and understanding of a housemother, for instance, is often invaluable. No one can say that her endeavor on behalf of one of her charges is not treatment, yet this cannot be called psychotherapy in any accurate sense. Another way of putting this, is to state that not everything that is helpful is treatment, although certainly all treatment must be helpful.

Objectives and Rationale of Psychotherapy

Psychotherapy as carried out in the Youth Authority gives the patient carte blanche to say anything that comes into his mind which will, to the best of his ability, express his feelings. It is our firm conviction that, with such freedom encouraged, the chances of such a patient's acting out these aggressions and resistance are less than they would be if he were not given the opportunity of such expression. In other words, the permissiveness of the therapeutic relationship between patient and therapist is a safety valve and the fact that the patient can and will, if properly encouraged and guided, give vent to any and all antisocial, disrupting contramores ideas and feelings will go a long way to relieve pent-up tensions, disruptive aggressions, confusion and anxiety.

To pursue this thought a bit further, the erroneous but far too prevalent notion that psychotherapy and the administrations of a therapist tend to diminish the need for discipline and self-control must be once and for all abandoned. On the contrary, one of the most important and vital roles psychotherapy can play is to gradually bring about greater control and reduce the compulsive irresistible urges and obsessional factors so that the patient can adapt himself better to his environment in the institution, on parole, and eventually in the outside world where he will again take his place. There will be less need to "act out" and a better chance for him to feel that he is a member of society, and that, as such, he must conform to its prescribed ethics. He acquires respect for other human beings with whom he will always have to deal. To the extent that these goals are attained, he will then learn to incorporate within himself the feeling that he "belongs"—that he no longer is an outcast, that he has a place under the sun, and that, without servility and without demanding inappropriate or exorbitant solicitude, he can respect and be respected.

Every effort in therapy is directed toward inculcating self-esteem without enough of which a human being either retreats into despair, depression and apathy, or, in order to spare himself the conscious pain of his inadequacies, proceeds to overcompensate, thus becoming an anti-social, lawless, aggressive menace to society, which is the core of the delinquency pattern.

It is necessary to be just as concerned about the status and needs of the troubled child as about the troublesome one. Of course, greater clinical acumen is needed for recognition of the former in order to bring him to treatment.

Psychotherapy Can Save Money

It is expensive to care for the sick regardless of the nature of the symptoms or the disease. Every good hospital in the United States operates in the red even with the aid of usually generous endowments. This is particularly true in large teaching hospitals and those affiliated with a medical school or center. Since, from the clinicians point of view, all the wards of the state with whom we deal are disturbed and also emotionally unstable, as well as usually infantile or immature, they are in this sense sick. The expense, great though it is and will continue to be, can be looked upon as a stitch in time. Money spent now on these children may prove to be the most economical investment the taxpayer could make. The rehabilitation, partial or complete, of one of these children can be expected to pay handsome dividends through saving money that would otherwise go to paying for the damage and the expense of custody that usually follow uncorrected and neglected delinquency.

Participation in the Research Program

The central office, with the assistance of the Chief of Medical Services, the Consulting Clinical Psychologist and the Chief of the Research Program, aided by the professional staff of each institution, has entered into various research endeavors, some of which are in the category of "pure research" and some of which will be more practical and, therefore, more directly helpful in helping us to deal more efficiently with the Psychiatric Treatment Program.

Good "treatment" can be properly regarded as anything which has a tendency to help the recipient to deal with his anxieties and tribulations.

"Treatment" includes environmental as well as personal impacts. It is clear, therefore, that every

locale and every person in the California Youth Authority will have an effect on the wards of the state with whom the Youth Authority deals. The range of such impact is unlimited. It includes such diverse matters as the type of clothing insisted upon, the size, shape and color of the dormitory or room; the convenience and efficiency of the showers and lavatories; the appearance, quantity and quality of the food; the tone of voice in which a gardener or janitor says, "Good morning"; and, of course, the friendliness and warmth in even the briefest encounter between the ward of the state and every member of the staff. Actually, the ward's initial commitment to the California Youth Authority, followed by a sojourn in a juvenile hall, are also significant but since these are not properly within the control of the California Youth Authority they will not receive any more than this cursory mention. The ward's first actual experience in the California Youth Authority begins at one of the two reception centers. The weeks that he spends there add up to the beginning of a continuum which progresses from the center to the institution, to parole and, finally, to his release to society.

Integration of Treatment and Custody

One of the most important efforts has been that of integrating "treatment" with custody. As was predictable, these two disciplines can never be expected to completely fuse. There will always be areas of difference of emphasis—there will always be people who stress one aspect of our total responsibility at the expense of the other. Hence constant watch must be kept to hold such hampering differences to a minimum. One hostile or unduly skeptical staff member can greatly diminish the over-all morale of his institution. It is my belief that the task of integration rests more on the Psychiatric Treatment Units than it does on the administrative staff, since the former are trained to understand differences or different points of view and are, therefore, better equipped to reconcile them. It is a great source of satisfaction that such efforts have been proceeding more satisfactorily than we had any reason to hope. The Psychiatric Treatment Units welcome the administrative staffs' participation in their conferences and classifications meetings.

By and large, a remarkable degree of cooperation, mutual understanding and "team play" seems to permeate our institutions. Exceptions, of course, there are; but they are not numerous and, when detected, they are dealt with forthrightly, not in a spirit of rivalry, but with a deep-rooted wish and conviction that all that is necessary is to understand. With mutual understanding comes respect for the attitude and point of view of others, even though these may materially differ from one's own.

In the California Youth Authority schools, institutions and camps that do not have Psychiatric Treatment Units, "treatment" is also of the greatest importance. Counseling, guidance, support, and instruction are all therapeutic. It may be said at this time that it is extremely important who does what to whom—just as important and in some cases more so than what or how he does it. Many staff members are making invaluable contributions to the "treatment" and rehabilitation of their charges, and it is impossible to evaluate these services in terms of their relative importance. It is important, however, for everyone who is doing a good job in this effort to realize it. No one is so broad-shouldered or secure that he does not need the repetitious confirmation of recognition and unsolicited commendation, and it is here that the professional and more experienced members of the Psychiatric Treatment Units can and must play the role of the reassuring and appreciative "father-figure." In general, the stature of any staff member will be in inverse proportion to the amount of encouragement and support he is apt to need and benefit from. This, I think, is a clue to how such efforts should be directed and to whom.

It may be advisable to state that for all intents and purposes "therapy" includes the connotation of psychotherapy; *treatment* can be thought of as broader and more comprehensive. Treatment is, therefore, no prerogative of the medical profession. Hence, it is being lavishly and continuously used by everyone regardless of varying philosophies, disciplines and training. Treatment is largely confined to attempts to deal realistically with conscious material, as brought out verbally by the persons with whom we are dealing. In contradistinction, therapy, and particularly psychotherapy, must take into account motivations which are largely unconscious, and although interpretations on this level are often not clinically indicated, the accomplished therapist can never afford to lose sight of them. They make up the core of his understanding, thereby furthering significantly his useful and meaningful therapy.

Indoctrination of the Indoctrinators

The indoctrination of the indoctrinators can, therefore, be seen to be an essential; hence it is proper to give time to it. Regularly scheduled meetings and interviews help in the indoctrination, but the effort must go further. It must comprise every single encounter, with the youths themselves and with other members of the staff, in the hallway, in the dining room and in the meetings which take place after hours. For some of these golden opportunities, unofficial, sporadic and spontaneous as they are, may often prove to be the beam of light shining into the darkness of misunderstanding.

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Work Potential of the Handicapped

The Physician's Role in Evaluating It

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• **Even a severe physical defect may not be a handicap on some jobs; even a mild one may be a handicap on others.**

Physicians considering the employability of a disabled person must not only appraise the person but also must analyze the job.

Job analysis must take into consideration the degree of exertion necessary, the emotional demands, working conditions (including accessibility of the place of work, of toilet facilities and the like) and job hazards.

Appraisal of the person must include a medical examination, a review of the work history, consideration of socio-economic background, and psychological testing.

WHEN EXAMINING a prospective worker, the physician's responsibility goes beyond the mere filling out of a standard medical form and the checking out of the positive and negative findings. If this examination is to be used as an effective tool in placing the applicant on a job, the physician must be aware of:

The *physical and emotional demands of the job*
The *capacities of the individual.*

This general rule is of particular importance when dealing with the handicapped.

Since a handicap is "any disadvantage or hindrance making success in an undertaking more difficult," any criterion for measuring work-power levels of the handicapped must relate the handicap to a specific undertaking in order to effectively evaluate fitness.

Since a large proportion of the millions of handicapped persons in this country are supported by public funds, many agencies, both government and private, are now attempting to analyze the problems involved in measuring the work capacity of this vast army of potential workers. The Office of Vocational Rehabilitation with branches in most large cities can supply interested physicians with information about available services which may assist them in evaluating handicapped patients. These services may include: (1) vocational outlook and goal for the patient, (2) biographical data of vocational interest, (3) financial assistance for medical, surgical and rehabilitation services, and (4) follow-up in performance in employment.

Other agencies such as the United States Employment Service, the State Commission for the Blind, the Veteran's Administration and numerous private agencies which can be found in the Social Service Directory of most cities, are also equipped to supply specialized services for the handicapped. Many of these agencies as well as prospective employers will call on the physician not only to request a standard physical examination but also his opinion on potential work power. The physician who is asked for such an opinion regarding a patient needs first to have a complete knowledge of the patient's physical and emotional capacities. The integration of this information with specific job demands can then only be made by a careful study of several factors. These factors can be estimated in some instances by the physician from his own knowledge and analysis, or by the physician in consultation with employer or vocational counselor, but in many instances the evaluation can be better accomplished in a rehabilitation setting where a group of experts can gather the necessary information to make the physician's decision more valid.

The information that must necessarily be reviewed includes the following:

(1) Analysis of the job
(2) Appraisal of the individual
 a. by the physician
 b. through work assessment program

ANALYSIS OF THE JOB

The job description can usually be obtained from (1) the prospective employer, (2) the referring agency, (3) the United States Employment Service, or (4) the prospective employee. Included in this description should be details of (1) the physical demands of the job, (2) the emotional demands of the job, (3) working conditions, and (4) hazards involved.

Physical Demands of the Job

Class I (heavy). Includes jobs requiring climbing, carrying, lifting. This would include linemen, warehouse men, construction workers, lumbermen, min-

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ers, stevedores and other workers whose jobs depend largely on gross physical energy expenditure.

Class II (medium). Includes jobs requiring handling, fingering, manipulating. A limited amount of climbing, carrying, and lifting may be required. Assembly line and bench workers, clerical and sales workers and others whose jobs require mainly manual skills belong in this group.

Class III (light). Includes jobs requiring planning, inspecting, directing, and the use of fine hand skills. Little or no climbing, carrying, and lifting is involved. Watch repair, drafting, small appliance repair, interviewing and most sedentary jobs belong in this group.

Emotional Demands of the Job

Although a job description may include some of the emotional demands, the description is rarely adequate to give the physician a complete picture of these important factors. Since approximately 80 per cent of today's jobs do not require tremendous muscular effort, failure to perform may often be due to an inability to meet the emotional demands. Pressures and tensions are potentially present in all jobs but the degree may vary from job to job, from industry to industry and even from area to area. The reaction of the individual to these tensions is equally varied and must be considered on an individual basis. Today, new jobs created by technological advances, and modification of the old jobs by automation, while they are less demanding physically, have increased many of the factors causing emotional distress. Evaluating the degree of frustration, monotony, boredom and stress involved in the performance of a specific job will be of value when matching the applicant to the job.

Working Conditions

The details of the working conditions will give the examining physician an insight into the environment where the prospective worker will perform. This is important because, occasionally, a handicapped person may be able to manage a specific job adequately but be defeated by adverse environmental conditions. Therefore, information regarding the accessibility of work areas and toilet and lunch-room facilities, the number of stairs with and without handrails, presence of elevators or ramps, and the availability of public or private transportation should be given careful consideration in addition to the more obvious conditions such as whether the work is indoors or outdoors, the temperature ranges, the working hours, the degree of humidity and air pollution, and whether or not the work will be done in cramped quarters, alone or with others, and at high or low altitudes.

Job Hazards

Modern safety practice and modern work methods have eliminated many of the occupational hazards of the past. Today, many accidents are believed to result from careless acts rather than from unsafe conditions. However, there are still industries that are considered hazardous: Coal mining, lumbering, marine transportation, construction and trucking head the list. Some of the factors to be looked for in reviewing the hazards of a specific job are the presence of moving objects, possibilities of falls from heights or on slippery floors and exposure to respiratory irritants, toxic material, radiation, noise and heat.

APPRAISAL OF THE INDIVIDUAL

Medical Examination. In order to estimate how the handicap will affect the performance of the proposed job, it will be of value to consider the following questions: Is the handicap permanent, temporary or progressive; is the nature of the handicap such that it might be aggravated by the performance of the job; will the handicap permit the individual to perform the job safely and without endangering his health or the health of his co-workers?

The medical examination should then proceed to evaluate the remaining physical and emotional capacities of the individual to determine whether he can perform the job on a competitive basis in spite of the handicap. In other words, can he meet production standards in speed, endurance, and accuracy; can he use the existing lunch room, toilet facilities, stairs, elevators; can he use the existing transportation facilities?

For jobs in Class I (heavy) the physician should evaluate those physical abilities required for work entailing high expenditure of energy, ascertaining insofar as possible that muscle power, joint range of motion, body agility and flexibility, body balance and the functional capacity of the cardiovascular, respiratory and endocrine systems are adequate for the performance of the job.

Jobs in Class II (medium) require particular attention to visual acuity, upper extremity range of motion, manual dexterity and the required standing, walking or sitting endurance for the specific job.

In Class III (light) the emphasis of the examination should be on fine finger dexterity, hand-eye coordination, communication abilities (speech and writing), memory and intellectual ability.

An impression of the emotional status of the applicant in terms of the demands of the job should also be reported. His cooperation, motivation, sociability, tolerance and emotional stability may be important factors in determining his vocational fitness.

When it is apparent that the applicant has the qualifications to meet all the demands of the job, then it is obvious that he is not handicapped for that particular occupation. If, however, there is a question as to the patient's emotional or physical ability to perform the job, the physician should try to determine whether the vocational outlook will change by advising on additional measures such as *treatment* (medical, surgical, psychiatric, physical rehabilitation) and/or *job modification* (rearrangement of working area, specially designed tools and equipment).

WORK ASSESSMENT

Assessing the capacity of a handicapped person for various kinds of work is extremely valuable when dealing with the more difficult vocational placement problems. It is useful in determining the validity of a selected vocational goal and, where no definite goal has been arrived at, may direct the examiner toward suitable vocational objectives. This assessment may corroborate the selection of a previously advised vocational plan, and then again it may open up entirely new vocational possibilties.

In the Work Assessment Program at the May T. Morrison Center for Rehabilitation in San Francisco, the following methods are used.

Medical examination is carried out to determine the actual physical capacities and sets up the necessary work limitations. An estimation of functional capacity is given, based on diagnostic and prognostic factors. Tests of functional and daily living activities are given and recorded in detail. At this point, recommendations may be made as to treatment, prosthetic aids and further diagnostic or functional tests.

A work history is compiled by the vocational counselor based on information obtained from the patient and from former employers, school records, previous training, professional licenses, hobbies and interests.

The socio-economic background is summarized by the Social Service Department. Information as to family history, economic level and community resources is made a part of this report.

Psychological testing is used to find out if the handicapped individual is emotionally and temperamentally suited for various kinds of work. Evaluation of intelligence, personality, interest and aptitude, as well as a psychiatric evaluation, may be needed.

With the foregoing information available, broad areas of employment possibilities become apparent. In order to investigate these areas and narrow them down to specific occupations, the Center has developed a series of *work sampling* procedures to test the patient's ability in a variety of job situations. The following six major occupational areas are explored: (1) sub-professional and technical, (2) clerical, computing, recording and public contact, (3) service—domestic and institutional, (4) mechanical and manual-skilled, (5) mechanical and manual-semiskilled, (6) elemental work—light, medium and heavy.

Work sampling is done under the supervision of registered occupational therapists, specially trained in this particular field, who report on work ability, rate of production, safety of performance, work habits, personal appearance, motivation and tolerance.

A try-out in an actual work situation may also be used to determine fitness. This might be done either at the place of employment or in the Center's sheltered workshop, under close supervision—usually in a ratio of one supervisor to two or three workers. At this Center for rehabilitation these trials in the workshop permit continuous observation of work aptitude, endurance, motivation, safety, work habits and ability to work with others.

Once the person has completed the selected series of examinations, tests and try-outs, a final staff conference is needed to establish a realistic and practical vocational plan. For some persons this might mean return to full-time competitive employment on a selected job; for others, part time or sheltered workshop employment might be advisable on a permanent or temporary basis. In certain cases, the emphasis might be on additional education, re-training or, perhaps, homebound work. In all cases where it is possible every community resource is brought into the evaluation procedure (i.e., vocational rehabilitation services, California Employment Service, insurance companies and others) and detailed reports on every phase are made available to the participating agency or the patient's physician.

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CASE REPORTS

Calcified Cervical Discs in a Child

FRANK T. PIERCE, JR., M.D., and
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CALCIFICATION of the intervertebral disc in childhood is an uncommon finding. The case here reported is of particular interest because films taken before the present illness revealed no calcifications and follow-up films showed rapid decalcifications of the involved discs.

Nineteen instances of cervical disc calcification in childhood have been reported. More than one disc was involved in three cases. In seven of fifteen cases of disc calcifications reviewed by Silverman,[4] the cervical spine was involved, and in five of those seven cases the calcifications were observed to clear or decrease.

REPORT OF A CASE*

A seven-year-old Caucasian boy was observed because of pain in the neck and right shoulder, with slight elevation of temperature, following two recent falls while running. The patient had been born at term after normal pregnancy and delivery. There was no history of excessive intake of vitamin D.

At 18 months the child had right otitis media which responded promptly to treatment. At 21 months medical advice was sought because of "blanking-out spells," which occurred when the child was upset or hurt and were associated with crying and breath-holding. No abnormalities were noted on physical, neurological and electroencephalographic examination. At 26 months, the child had left otitis media and nasopharyngitis which responded rapidly to treatment.

When the patient was two and a half years old the cervical spine was incidentally visualized from the fourth cervical to the first thoracic vertebra in a film taken because of a clavicular fracture, and no disc abnormality was shown at that time. At three and a half years of age, the child fell again, lacerating his chin, but no spine injury was recorded.

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Submitted October 15, 1959.

*The authors wish to thank Dr. J. W. St. Geme for permission to study this case.

The present illness leading to examination of the cervical spine began August 23, 1958, when the child fell flat on his back while running. He complained for two days of nonradiating pain in the right shoulder and neck. Three weeks later he fell and again soreness developed in the neck. The temperature rose to 99° F. and slight enlargement of cervical nodes was noted.

Upon physical examination the only abnormality noted was pronounced left sternocleidomastoid spasm. There was no nasopharyngitis. Results of examination of the blood and urine were within normal limits. The temperature remained elevated for one week, varying from 99.4° F. to 99.8° F. Pain and limitation of motion of the neck gradually diminished over a ten-day period and the patient thereafter remain asymptomatic.

Roentgen examination of the cervical spine on September 15, 1958, revealed extensive calcification of the discs between the fourth and fifth and the sixth and seventh cervical vertebrae (Figure 1). There was some associated decrease of the cervical lordosis. Laminograms taken October 10, 1958, showed slight but definite regression of the disc calcification and further roentgen studies on April 20, 1959, showed the calcifications in the disc between the fourth and fifth vertebrae to have almost completely disappeared and those in the next lower interspace decidedly diminished. No calcifications were noted in films of the thoracic and lumbar areas.

Cinefluorographic examination showed diminished motion of the lower cervical spine during flexion and extension of the head. The calcified discs did not show the gliding action in an anteroposterior direction that is associated with degeneration of a disc in adults. The calcification of the disc afforded good visualization of the nucleus pulposus during flexion and extension. The motion which was present appeared quite normal, and apparently the calcifications did not interfere with the function of the nucleus pulposus.

DISCUSSION

Birth trauma, hereditary factors, tuberculosis and poliomyelitis have been suggested as etiologic factors in disc calcification in childhood, but no firm conclusion can be reached. The changes are unre-

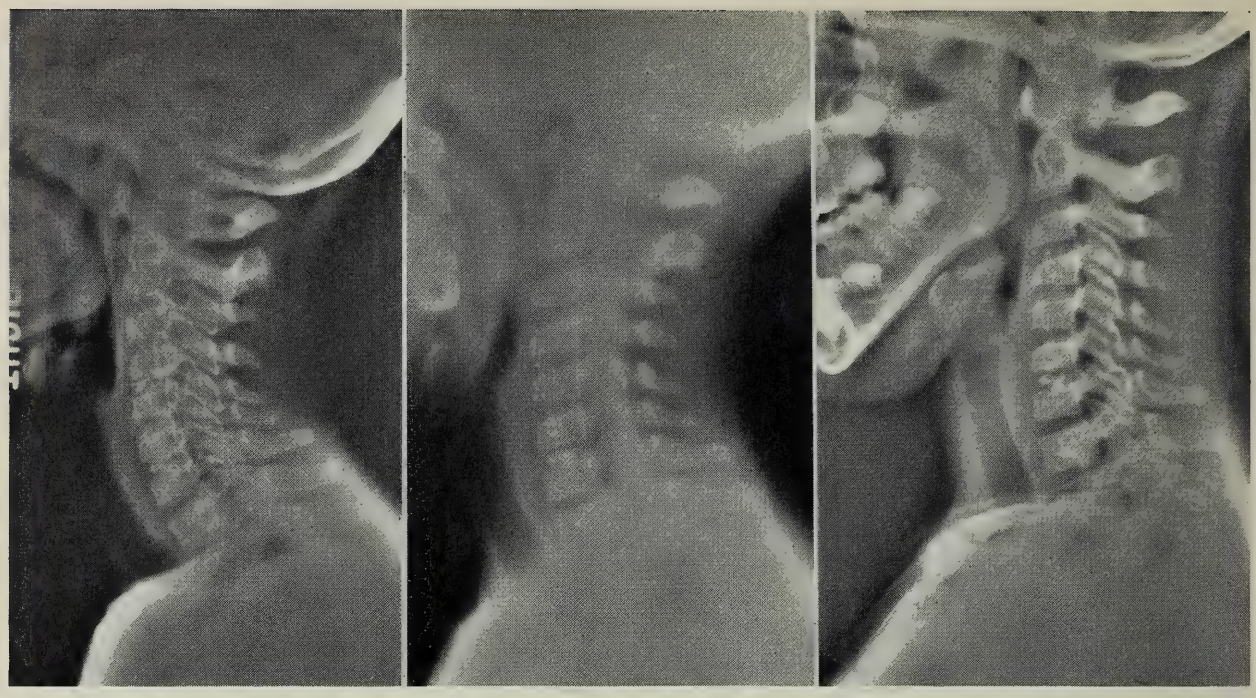


Figure 1.—*Left:* Lateral cervical spine roentgenogram taken September 15, 1958, showing calcified fourth and sixth intervertebral discs. *Center:* Laminogram taken October 20, 1958, showing resorption of the major portion of nucleus pulposus calcification at the fourth cervical vertebra. Calcification at the sixth vertebra is somewhat diminished. *Right:* Roentgenogram taken April 20, 1959, showing complete resorption of disc calcification at the fourth and further regression at the sixth vertebra.

lated to the calcifications that occur in older people as part of a degenerative process. Alkaptonuric ochronosis and vitamin D intoxication are two causes of disc calcification, but in the patient in the present case, as in previously reported cases, there was no evidence of either. Ochronosis is a metabolic disease which causes cartilage degeneration. Fortunately, the associated arthritis and calcification do not occur until the third or fourth decade.

Mild trauma has been stated to be a predisposing factor. However, mild trauma is so common in childhood that disc calcification must be an exceedingly rare response to it, if indeed there is any causal relationship at all.

The concept of metastatic infection has been raised since some of the children, as in the present case, have a slight fever and occasionally leukocytosis is observed. But in the case here reported there was no evidence of an infectious process and the prompt recovery without antibiotic therapy indicates infection was not a factor. The history of temper tantrums and breath-holding noted in this case was not reported in other cases and was probably irrelevant.

Of considerable interest was the availability of films of the cervical spine taken in 1953 which showed no abnormality at that time. Then films taken seven months after the discovery of the disc calcification showed pronounced resorption in this short period. We believe that the discovery of the calcified discs was an incidental finding in x-ray study following minor trauma and that the trauma and the calcification were not etiologically related. It is very unlikely the calcification could have developed in the three weeks between the injury and the x-ray examination. Perhaps disc calcification in childhood appears and then disappears without obvious clinical manifestation and is more common than the few reports in the literature would suggest.

SUMMARY

Calcification in two cervical discs were found in a seven-year-old boy following minor trauma but apparently were not related to the injury. The lesions caused no definite clinical manifestations. Seven months after they were first observed, the calcifications were considerably diminished.

An x-ray film taken when the patient was two and a half years of age for examination of a clavicular fracture showed no cervical calcification present then.

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Periodic Paralysis Associated with Hyperthyroidism

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FORTY-ONE CASES of periodic paralysis associated with hyperthyroidism have been reported[29,30] since Rosenfeld's description in 1902.[30] The periodic paralysis associated with hyperthyroidism is quite similar to the familial type but each type has certain distinguishing characteristics.

Several theories of the pathogenesis of periodic paralysis have been offered. Recent developments in the field of steroid chemistry have resulted in the isolation and identification of the naturally occurring mineralocorticoid called aldosterone. This hormone has been found by Conn[8] and others[1,4,9,12,17,24] to cause a condition called primary aldosteronism which is characterized by spells of paralysis, polyuria, polydipsia and hypertension. The laboratory findings in this condition are essentially hypernatremia, hypopotassemia and metabolic alkalosis.

Conn and associates[7] recently reported that immediately preceding and during an attack of paralysis there is an increase in the rate of aldosterone excretion. Somewhat conflicting information along this line was reported by Jones and associates.[20]

The following is a report of studies that were carried out in the case of a patient with periodic paralysis associated with hyperthyroidism.

REPORT OF A CASE

A 23-year-old Caucasian man was referred to the Communicable Diseases Unit of the Los Angeles County General Hospital in January, 1956, because of flaccid paralysis which had started in the lower extremities and progressed to involve the muscles of the upper extremities and trunk. It had begun only about three hours before admittance, when the patient on attempting to leave a theater found that he could barely walk even with aid. By the time he was admitted to the hospital the paralysis was so severe that the use of a tank respirator was considered. The patient had had no previous attacks. At the time of admission, he denied any symptoms of nervousness or tremor. There was no family history of paralysis.

On physical examination the patient was observed to be normal appearing, well developed, well nourished and somewhat apprehensive. Flaccid paralysis of the lower extremities, the back and the left upper extremity were noted, and there was also slight weakness of the right upper extremity. The blood pressure was 158/50 mm. of mercury, the pulse rate was 120 and the rectal temperature 100.6° F. Deep tendon reflexes were absent in the lower extremities and hypoactive in the upper extremities.

The hemoglobin content was 14.5 gm. per 100 cc. of blood. Leukocytes numbered 9,800 per cu. mm. with the cell differential within normal range. Serum potassium was 2.1 mEq. per liter. The specific gravity of urine was 1.025, the pH was 7.5 and it contained no albumin.

The muscle weakness progressed to involve the right arm and the chest muscles. The vital capacity dropped to about 75 per cent of normal. No abnormalities were noted in the cerebrospinal fluid on two occasions. The patient received supplemental potassium and in 24 hours was able to move all extremities quite well. An electrocardiogram taken 24 hours after the attack showed sinus tachycardia (rate 120) but was otherwise within normal limits. Over the following seven days the serum potassium ranged from 4.5 to 5.9 mEq. per liter and serum sodium values ranged from 150 to 157 mEq. per liter. There was no clinical evidence of hyperthyroidism on this admission other than the tachycardia. An attempt to precipitate an attack of paralysis by exercise, intravenous glucose and insulin was unsuccessful.

Table 1 gives the results of further studies made during a period between attacks of paralysis.

The patient was discharged with instructions to take 80 mEq. of supplemental potassium per day in divided doses. In spite of this dose of potassium the patient had a second attack of paralysis six weeks later. About the time of this attack, symptoms and laboratory data became consistent with hyperthyroidism. Uptake of radioiodine in 24 hours was 72 per cent and the protein bound iodine content was 13.1 micrograms per 100 cc. The result of a second radioiodine uptake test was 71 per cent in 24 hours. A scintogram showed a slightly enlarged thyroid gland with diffuse distribution of the radioactive iodine.

The next paralytic attack occurred in April 1956. At that time two consecutive 24-hour samples, starting six hours before the onset of paralysis, were obtained for assay of aldosterone content. On the day of attack the patient excreted 24 micrograms of aldosterone per day (normal 1 to 3 micrograms per day) and 25 micrograms of aldosterone on the day following the attack.* This attack occurred even though the patient was taking 160 mEq. of potassium daily.

Two months later the patient had another severe attack. At this time serum potassium and serum sodium were 3.1 and 150 mEq. per liter, respectively. The patient showed no response to 2 mg. of Neostigmin® given intravenously, whereas oral potassium chloride checked the progression of the paralysis. Within four hours he was asymptomatic except for mild residual weakness.

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Submitted November 13, 1959.

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*Since a high potassium content has been found to increase the aldosterone excretion rate,[22] this patient was studied for this phenomenon after correction of the hyperthyroidism. After the patient had been receiving 160 mEq. of potassium daily for one week, he was found to be excreting 5 and 6 micrograms of aldosterone per 24 hours on successive days.

The patient was observed in three of his five severe attacks. A typical attack usually began between 3 and 5 a.m. after a day of extra exertion and chilling. The patient would awake unable to move his lower extremities and with a feeling "as though a rod was being removed from his thighs and legs." The normal strength of the muscles seemed to gradually disappear, the muscles of the thighs and legs being affected first and most severely. The weakness would then spread centrad to involve the abdomen, and in two instances it involved the upper extremities. All the attacks except the first were related to exertion and chilling. All were relieved with potassium.

Propylthiouracil was given for two months preparatory to operation, and subtotal thyroidectomy was carried out. No spells of muscular weakness have occurred in the three years since the administration of propylthiouracil was started and the patient has remained euthyroid.

METHODS

The alveolar carbon dioxide determinations (Table 1) were made continuously with an infrared CO_2 analyzer[6] as the arterial sample was obtained anaerobically. The pH of this specimen was determined immediately in a blood electrode of a Beckman Model G pH meter. The stimulated saliva was obtained while the patient was chewing paraffin. Sodium and potassium concentrations were measured by a Beckman Model DU flamephotometer. The urinary uropepsin determinations were made on a 2-hour timed specimen collected in the fasting state and analyzed as described by West.[38] Sodium-22 was used to measure the 1-hour and 24-hour exchangeable sodium. The 1-hour sample was used as a measure of the extracellular sodium. Potassium-42 was used to measure the 24-hour exchangeable potassium.

Initial Laboratory Work. The initial laboratory work showed that the patient had a hypopotassemia, a high urine specific gravity with an alkaline pH.

Further Studies. The patient had no evidence of metabolic alkalosis. The salivary ratios of sodium to potassium were within normal limits. The uropepsin excretion rates were all normal, as were the extracellular, intracellular and 24-hour exchangeable sodium values and the exchangeable potassium. The 24-hour urinary creatine was increased.

DISCUSSION

Familial periodic paralysis and the periodic paralysis associated with hyperthyroidism appear to be closely related. Both have similar clinical manifestations and precipitating factors, and they are similar also in the changes in electrolyte metabolism associated with them. Periodic paralysis associated with hyperthyroidism differs in that there is no hereditary relationship. It is limited almost entirely to males[33] and correction of the hyperthyroidism results in a cessation of the paralytic episodes.[11,18,31,37] The defect remains, however, as evidenced by the fact that the paralytic episodes return with the return of hyperthyroidism.[11,26]

TABLE 1.—*Results of Laboratory Tests Carried Out Between Attacks of Periodic Paralysis*

Test	Results	Normals
*Alveolar CO_2 (mm. Hg.)	35	35-45
*Arterial pH	7.41	7.35- 7.45
Unstimulated salivary Na/K ratio	0.59, 0.61, 0.58	0.5- 1.5
Stimulated salivary Na/K ratio	0.85, 0.85, 0.65	0.8- 3.0
Uropepsin excretion rate units/hour	12-19	15-40
Extracellular sodium mEq.	2590	
Intracellular sodium mEq.	1100	
Exchangeable sodium (24-hr.) mEq.	3700	
Na_e/wt. mEq. per kg.	44.0	37.8-47.5
Exchangeable potassium (24 hr.)	3435	39.8-62.3
K_e/wt. mEq. per kg.	44.4	
24-hour urinary creatinine gm.	1.90	1.23- 2.11
24-hour urinary creatine gm.	0.62	0.02- 0.34

*Simultaneously obtained.

Shinosaki[32] was able to increase the severity and frequency of episodes of paralysis with thyroid hormone in six of seven patients with periodic paralysis. On the other hand, Wolf[39] reported six cases of familial periodic paralysis in which the patients were not benefited by potassium but could be maintained free of attacks with thyroid hormone.

At present, reports in the literature differ as to the effect of thyroid hormone on adrenal cortical function. In one study[15] it was reported that the aldosterone excretion rate is normal in thyrotoxicosis. The author has observed that the aldosterone excretion rate may be three times normal in severe hyperthyroidism.

Several studies of the electrolyte metabolism during an attack of periodic paralysis have been reported showing that for one to two days before and on the day of an attack there is a decrease in urine output of water, potassium, sodium and chloride.[10,33] The serum potassium and phosphorus are characteristically low during the attack of paralysis.[7,10,33] As the serum potassium and phosphorus return to normal the paralysis disappears.

The exact reason for the drop in serum potassium in periodic paralysis has not been determined. Biopsy of specimens taken during an attack of paralysis have shown that the muscle potassium is slightly increased.[7] According to Vastola[36] there is a total gain of approximately 130 mEq. of potassium per kilogram of muscle solid, which in the average patient would be approximately a 1,300 mEq. increase in muscle cellular potassium. This figure must be high unless potassium transfers from some source besides the extracellular fluid. The rapid absorption of carbohydrates or the injection of insulin or of epinephrine will result in an increase of the utilization of carbohydrate in the tissues. Insulin and epinephrine also have a glycogenolytic activity on the liver, which would result in a loss of potassium

from the liver location. Conn reported that the sodium and potassium content of muscle in periodic paralysis are both increased above normal in terms of mEq. per kilogram of muscle and that there is a decrease in exchangeable potassium with an increase in the exchangeable sodium. In the case herein reported the exchangeable sodium and potassium were within normal limits for a period between two attacks. If the exchangeable potassium is low and the exchangeable sodium is high in periodic paralysis, this electrolyte shift may well have been produced by intermittently high aldosterone before the attack of paralysis. Further, if the muscle potassium is high and the exchangeable potassium is low, then other tissues than muscle must be deficient in potassium. Further studies would seem indicated.

Patients with primary aldosteronism have been found to have chronic total body deficit of potassium and chloride, a retention of sodium and a metabolic alkalosis as the most pronounced chemical changes. These patients have an increase in exchangeable sodium and a decrease in exchangeable potassium.[9] The increased aldosterone in these cases has its origin in adenomas of the adrenal cortex or in hyperplasia of the adrenal cortex. Removal of the functioning adenoma or hyperplastic gland results in a cure of this condition. Periodic paralysis associated with hyperthyroidism may be distinguished from primary aldosteronism by the history, physical findings and the previously mentioned laboratory tests.

Conn and associates[7] reported that in addition to the electrolyte changes in periodic paralysis there is a decided increase in urinary aldosterone excretion rate for one to two days before the onset of the paralysis. About the time that the paralysis subsides (in a spontaneous attack) the aldosterone secretion rate is below normal. An increase in aldosterone secretion rate also occurred in the attacks induced by glucose and insulin.

In the present case an attack could not be induced factitiously; hence a study of the electrolyte change could not be carried out. The situation which consistently seemed to precipitate an attack in the patient was a combination of strenuous physical exercise and chilling which occurred when he went surf-fishing. The aldosterone excretion rate the day of the attack and for 24 hours afterward was definitely increased above the amount one would anticipate from the effect of potassium chloride in the diet.

Clinical studies on the effect of the injection of aldosterone on electrolyte metabolism have been difficult because of the scarcity of the hormone. Reports in the literature[2,16,23] so far seem to indicate that aldosterone causes retention of sodium, chloride and water, with a variable effect on potassium. So far, not enough of the hormone has been given to produce an attack of paralysis. Dosage levels so far have been about 3,000 micrograms per day. If the aldosterone assay method now in use measures about 1 per cent of the total aldosterone output,[22] then patients with periodic paralysis may well be forming from 3,000 to 20,000 micrograms per day immediately preceding and during an attack. Since the electrolyte changes can be precipitated by the injection of carbohydrates, epinephrine or insulin[13] in normal persons without causing paralysis, the development of a high aldosterone output just before and during an attack in patients with periodic paralysis has considerable significance.

The exact mechanism by which the excretion of aldosterone is controlled under normal conditions is still under investigation in several centers. Studies have shown that the level of the serum potassium[22] and the extracellular volume[3] have very important roles in the regulation of this steroid. From the reports of Newman, Redgate, and Farrell,[28] it appears that the main integrating center for the control of aldosterone secretion is in the midbrain, with the regulating hormone, glomerulotropin, present in the pineal gland. In the disease entity of periodic paralysis associated with hyperthyroidism, it would seem most likely that there is an inborn latent physiological defect in the adrenal cortex or in the midbrain regulating center which under the condition of hyperthyroidism and stress results in an intermittently high secretion rate of aldosterone. The clinical manifestations could then be explained by the influence of aldosterone upon the mineral metabolism resulting in muscle paralysis. Other investigators[19] have suggested that an abnormally sensitive adrenal gland may be a factor in periodic paralysis.

An alternate explanation for the high aldosterone levels in periodic paralysis would be a defect in the muscle tissue which causes hypopotassemia and fluid volume shift which results in a secondary rise in this hormone. Further studies would seem to be needed to establish whether or not larger doses of aldosterone can produce the clinical paralysis acutely without potassium diuresis, or whether aldosterone is increased secondarily to some electrolyte or volume change.

SUMMARY

This is a case report of a patient with periodic paralysis associated with hyperthyroidism who had a remission of the paralysis after subtotal thyroidectomy. The patient was found to have none of the persistent electrolyte defects of primary aldosteronism between attacks of paralysis. The 24-hour exchangeable sodium and potassium were both normal. He was found to have a high excretion rate of aldosterone the day of and the day following an attack of paralysis associated with hypopotassemia.

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SAMUEL R. SHERMAN, M.D. San Francisco
JAMES C. DOYLE, M.D. Beverly Hills
MATTHEW N. HOSMER, M.D. San Francisco
IVAN C. HERON, M.D. San Francisco
DWIGHT L. WILBUR, M.D. San Francisco

EDITORIAL

Milestones

ONE OF THE human and heartwarming aspects of the annual meeting of the California Medical Association is the opportunity to express to selected members the appreciation of the entire Association for services rendered above and beyond the call of duty.

Two such opportunities were presented this year, when Donald D. Lum and Francis J. Cox chose to retire from their active parts in the life of the C.M.A.

Donald Lum retired from his service on the C.M.A. Council by the simple expedient of notifying his electors in his county society that he did not choose to serve an additional term on the Council. His action was reminiscent of the late Calvin Coolidge's crisp statement that he "did not choose" to stand for reelection to the presidency of the United States; reminiscent and equally effective.

Doctor Lum served the Association for 13 years as a Councilor from Alameda-Contra Costa counties, the final six years as Chairman of the Council. He was always ready to discommode himself in favor of Association business and he was noted on the Council as a chairman who was simultaneously efficient, kindly and understanding. His policy at all times was to permit free and open debate on the subject at hand, at the same time expediting the business of the Council and assuring equal opportunity to all participants on all subjects. This combination of talents is not always present in a presiding officer, especially in a body representing widespread geographical and ideological areas. In Don Lum the Council found this rare person and proved its appreciation by continuing to elect him as Chairman for as long as he elected to serve. His voluntary retirement left a large and important post to be filled by others. His recognition before the House of Delegates was indeed a slight token of the esteem and admiration in which his fellows held him.

To fill Doctor Lum's post as Council Chairman the Councilors voted at their organization meeting to elect Samuel R. Sherman of San Francisco, with Ralph Teall of Sacramento as Vice-Chairman. Doctor Sherman has served on the Council for the past six years and has been one of its most active members. In addition to his services on this deliberative body he has assumed a number of important assignments where his talents have benefited the C.M.A. immeasurably. One of the most important of these tasks has been as chairman of the Liaison Committee to the State Department of Social Welfare, where he has represented the medical profession most capably and has been able to impress upon a large number of important lay administrators the importance of recognizing the skills of the profession in treating welfare patients and the need of cooperation in a huge state-federal program where such cooperation is vital for the good of the people.

Sam Sherman brings to the chairmanship of the Council his vast store of experience in a large and active county medical society, where he served in many capacities and eventually as president. His dealings with public officials, labor leaders and other important groups have made history in his local society and the skills he has developed in the process are now made available on a statewide basis.

In the case of Doctor Francis J. Cox, the C.M.A. has lost the services of one who can readily be likened to the strong, willing and intelligent wheelhorse of a bygone day. Frank has carried on for the past 12 years in the fields of medical economics and related topics. As Chairman of the Commission on Medical Services he has achieved nationwide acclaim as the father of the Relative Value Studies, a project which from a philosophical beginning has come to be accepted by medical societies, insurance carriers, government agencies and others as a standard of nomenclature, a clear-cut analysis of medical procedures and a basis for all physicians in evaluating their own individual fee systems. In addition, he has labored long and with loving care in the field of bringing medical and surgical fees for industrial

cases up to a position more nearly approximating parity with modern practice. From the ultra-depressed state of industrial practice of ten years ago, industrial medicine has, mainly through Frank Cox's efforts, progressed to a position of increased importance and recognition. The ovation given Doctor Cox in the House of Delegates speaks more eloquently than thousands of words of the esteem and love of his colleagues.

It is often said that in any large professional organization only a small percentage of members take an active part. Of that small percentage, only a few really achieve the real heights of service. In the cases of Don Lum and Frank Cox, the California Medical Association has found two of these few. For them, it must be gratifying to go out of office with the accolades of their fellow physicians providing a well-deserved triumphal recessional.

Public Relations

PROBABLY the most important decision of the 1960 House of Delegates of the California Medical Association was the adoption of a program of accelerated public relations and approval of an increase in dues to finance it.

Widespread interest in the subject was evident in the fact that the overall proposal was placed before each of three reference committees, one reviewing it in the form of a report, another in the matter of financing and the third in response to a resolution calling for implementation of the proposals already made and circulated in advance to the members of the House.

In brief, the proposed program calls for the recognition of individual human rights and the importance of providing, through physician-patient contacts, for the realization of these rights by the hundreds of thousands of people who visit physicians' offices each day. In short, "what is good for the public is good for the medical profession."

While this concept is a far cry from Madison Avenue techniques it was made obvious by the House of Delegates' approval that physicians are ready and willing to assume their individual roles in sponsoring the rights of their patients as individuals.

In adopting the augmented PR program the House of Delegates also voted the funds to carry the financial load—in this instance an increase of ten dollars in the annual dues of each active member. While the unit cost is not high, the aggregate will provide a sum of money which will be entrusted to the review and coordinating committees envisaged as a part of the program.

This program again pushes the California Medical Association into the national limelight, again provides the opportunity for leadership which the Association has never shirked. As the starting point in a program which must of necessity continue, the proposed public relations plan offers the chance of aligning medicine with the public in furtherance of the best—and identical—interests of both groups.

Letters to the Editor...

This letter, written to a physician associated with a Hearing and Speech Center, is printed here for the light it may cast into an area that ought to be better known to practitioners of many orders of medicine.

WOULDN'T IT BE STRANGE, indeed, to hear today that a woman who was slightly, and perhaps, neurotically anxious about a lump in her breast was told repeatedly by her doctor to "wait and see" what develops —not to worry because the breast didn't "look" cancerous; and, besides, there wasn't much to do about it if it was cancer?

Why is it, then, that I, and thousands of other women today, still receive much the same advice in another field of medicine where knowledge available to all doctors sharply and equally contradicts it? Actually, I—and my daughter, whose trouble it was —were "lucky." I'm an "overanxious" mother, and my persistency did result in an early diagnosis; I did find out just how much could be done if it were discovered and treated early; and I've been relieved of a tremendous burden of later suffering by coming to know and accept early what can be done to save a normal life for my child.

Will you feel it's an anticlimax if I go on to say that my daughter's trouble was deafness? Or can you possibly share with me the feeling which parallels the tragedy of a needless death from cancer with the tragedy of a needless life of isolation and muteness which "untreated" deafness can mean?

I know, now, how difficult it can be to spot even a severely deaf infant in a doctor's office. But will you laugh at me if I admit that I used to think that

one of the things the pediatrician learned by examining the ears of my newborn was whether her hearing was normal? So it was easy, a few months later, to accept the advice to "wait and see" when I raised some doubts about her hearing. I was told she did not "seem" deaf, and also that she couldn't be, because her cry and laugh and babbling were quite normal. Not until a year had passed was I finally referred to an ear, nose, throat specialist.

Our testing at home had had completely contradictory results, but here we received a very tentative confirmation of our suspicions. Still, we thought she was only a "little hard-of-hearing." Deafness had barely entered my thoughts, much less been accepted there with its partner of muteness which was my sole knowledge of the subject.

From the ENT doctor we first learned that there were such things as hearing tests for young children —something which few mothers of deaf children seem to learn from their pediatricians. But here, again, we were told to "wait and see"; that tests weren't reliable and it wouldn't make any difference if we waited. Here, my overanxiety stepped in again, and I persisted in asking for referral to the medically supervised Hearing and Speech Center of my community.

This was the referral which meant the difference between future hope and despair, though here, against all appearances, the diagnosis was carefully made — profound deafness. It took another six months before we could really accept our child's deafness and begin to work with it in the ways the Hearing Center showed us; and it was another six months before she got a hearing aid.

Our daughter is three years old now; a few months ago, she learned to "hear" the doorbell and answer it for me; a minute ago, when she ran outside, I yelled after her to close the door, and she did; yesterday, we played our little game of "who do I love?" and she told me, speaking her own name. Very small tokens of normality these are, indeed; there is a lifetime of work ahead for her and us on the road to language and speech—but my daughter will never be mute, and we are learning to conquer the frustrations which would isolate her.

For we lost only two years or so of that crucial first five years when the human body is primed to develop understanding and speech. Our near neighbors who have a deaf youngster lost three and a half years by their "healthy" acceptance of their doctor's advice not to worry about the child's failure to talk —each child has his own pace, after all. A mother whom I met last month lost four of those years because the doctor substituted a tentative diagnosis of mental deficiency for referral to the nearest audiological center.

I wish these mothers were the uncommon ones, who simply had incompetent doctors; but, with few exceptions, they are not; their experiences, and mine, are those of almost every mother of a deaf youngster with whom I've talked or heard about.

The exceptions happened to see doctors who knew that audiologists can now test hearing from the age of five months with reasonable accuracy as far as deafness goes. They happened to see ENT men who knew that a very young deaf child makes far better use of a hearing aid than a child who does not begin to use one until the school years. They saw pediatricians who realized that the parents' early acceptance and understanding of deafness permits a far more normal personality development for the child than is possible when the early years have slipped by without effective communication.

When the next mother mentions some small doubt about her young child's hearing to you, couldn't you please refer her for a hearing test with the same educational persuasion with which you would refer her for a lung x-ray or a biopsy for cancer? She'll probably never be properly grateful if the report is "normal hearing"; but she will always be so if she has thus learned early that her child is deaf.

Sincerely yours,

JUSTINE ROBERTS
152 Sycamore Avenue, Mill Valley, Calif.



California MEDICAL ASSOCIATION

NOTICES & REPORTS

The California Medical Association Delegation to the A.M.A.

THE American Medical Association establishes its policies through a House of Delegates in exactly the same manner as this same body operates in the California Medical Association.

Each of the 53 component state or territorial associations in the A.M.A. is allowed one delegate (and one alternate) for each 1,000 active dues-paying members or fraction thereof. Representation for any calendar year is based upon a membership count made by the A.M.A. on December 31 of the preceding year.

On this basis, California now has 17 delegates and a like number of alternates to the A.M.A. This is the largest number from any one state in the A.M.A. House of Delegates, equalled only by New York.

In 1959 the A.M.A. House of Delegates numbered 210 members, this total comprising 185 delegates from component associations, 20 from the scientific sections (one each) and five from the Armed Forces of the United States. Of the 20 scientific section delegates last year, three were California physicians.

The California delegation at each A.M.A. meeting consists of all delegates and alternates from California, together with delegates and alternates from the scientific sections who are from California, who are invited to participate with the elected members.

The delegates and alternates from California are elected for two-year terms at the Annual Sessions of the C.M.A. They are elected as representatives of the C.M.A. and not as members of any particular specialty or residents of any particular area or section of the state, nor as members of any particular county medical society. By custom over a period of years, delegates have been chosen from various areas of the state, so that today all geographical regions of California are represented in the California delegation.

Delegates are usually selected by the C.M.A. from among those members with considerable experience and participation in C.M.A. affairs. This background gives them a familiarity with California conditions and beliefs and permits them to serve effectively at the national level and to give California proper representation.

Alternate delegates to the A.M.A. are selected by the same process. There is no requirement that the alternate be from the same area as his delegate; today there are several offices where the delegate and his alternate are from different locations.

By action of the Council, approved by the House of Delegates, the alternate delegates to the A.M.A. are sent to each A.M.A. meeting at the state association's expense. This permits the alternates to study the procedures and methods used in the A.M.A., to become acquainted with the delegates and alternates from other states and to gain the knowledge which would permit them to step in as a seated delegate in the event of the absence of the delegate himself. The know-how gained by this experience has been amply demonstrated over the years when such situations arose.

Because of this procedure, the C.M.A. House of Delegates in recent years has followed the practice of electing as delegates members from the alternate delegate group who have been indoctrinated and educated in A.M.A. methods. Experience has shown that several years of experience are needed to provide an adequate groundwork for the delegates, experience which the alternates have gained through their earlier participation in A.M.A. meetings.

At A.M.A. meetings the California delegation caucuses on the day preceding the opening session,

PAUL D. FOSTER, M.D. President
WARREN L. BOSTICK, M.D. President-Elect
JAMES C. DOYLE, M.D. Speaker
IVAN C. HERON, M.D. Vice-Speaker
SAMUEL R. SHERMAN, M.D. . . Chairman of the Council
RALPH C. TEALL, M.D. . . Vice-Chairman of the Council
MATTHEW N. HOSMER, M.D. Secretary
DWIGHT L. WILBUR, M.D. Editor
HOWARD HASSARD Executive Director
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General Office, 693 Sutter Street, San Francisco 2 • PRospect 6-9400
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elects its own officers and reviews all subjects and candidates expected to come before the House of Delegates for action or election. A unit rule is not used; each delegate is a free agent. Ordinarily there is almost complete unanimity of opinion in the delegation, both as to business and to candidates for office, but there is no stigma attached to minority opinions or independent actions by individual members.

All delegates and alternates are given assigned duties during the A.M.A. sessions and are expected to carry out their assignments and report on them to the entire delegation.

By following these procedures over a period of years, the California delegation has become known in the A.M.A. as a most highly effective and respected group. By choosing qualified candidates in the first place, by providing for the education of the alternate delegates, by advancing the alternates to delegates when vacancies occur and by operating on a business basis during the A.M.A. sessions, the California delegation has attained its present stature in the A.M.A. The most eloquent recognition of this position is that many other state delegations have followed California's lead in the effective choice of representatives, in the education of them and in organization of their efforts.

SAMUEL R. SHERMAN, M.D.
Chairman of the Council

The "Fiery Trial" of Private Practice

Report of the Commission on Medical Services

MR. SPEAKER, AND MEMBERS OF THE HOUSE OF DELEGATES:

We are just beginning a decade that many economists believe promises prosperity and unparalleled economic development. This decade may well prove the most eventful in the history of private medicine, and one in which events will decide whether the practice of medicine will survive as we have known it, or collapse.

Already we are approaching a crossroads at which decisions must be made that will affect us all. There is every indication that forces and pressures outside medicine will soon accept or reject the voluntary approach to meeting the costs of medical care and the methods by which that care is delivered or received.

Social evolution and changing economic conditions are clearly reflected in all walks of life. The growth pattern of the attitude of the public regarding medical care can best be shown by a historical résumé of both national and state actions.

Congress first entered the field of health care in 1798 when the United States Marine Hospital Service was started. By 1929 expenditure of public money for medical care, excluding funds for medical facilities, amounted to $414 *million*. In 1958 it was $4.9 *billion*. To these amounts add the private expenditures for this purpose: in 1929, $3 billion; in 1958, $16.7 billion. A total of nearly $22 billion is now being spent annually on health and medical care—about one-fourth of this total by federal, state and local government units.

The degree of change and the relative emphasis upon the problems of medical care have varied directly with the intensity of social and economic ferment.

As we enter this period of acclerated change, it is well to recall that the present urgent and immediate probems of medical care are not new.

On previous occasions, this House of Delegates has faced issues similar in magnitude to those we are discussing at this Annual Session. Today we are facing the issue of government medical care as a social benefit—Forand-type legislation, for example. However, even before World War I there was agitation for—and opposition to—compulsory or voluntary systems of medical care insurance.

The main events and development of issues in the past 42 years are best emphasized by dividing the time into three periods: 1910-1920; 1921-1933; and 1933 to the present.

1910 TO 1920

In the first period of sporadic thought about medical care programs, plans reached the legislative stage in several states, but no bills of this order were passed except those setting up workmen's compensation. (In California, a Workmen's Compensation Act was passed in 1912.)

1921 TO 1933

The second period was a quiet one devoted to the study of basic facts only superficially comprehended in the first period. It was during this period that the famous "Committee on the Cost of Medical Care," with Doctor Ray Lyman Wilbur of California as its chairman, was established. This committee released a total of 28 reports on health matters between 1928 and 1932. The final report of that group, and the reactions to it, form the base for the third period of the compulsory versus voluntary medical care insurance movement.

1933 ON

The third period has been characterized by actions on a much broader base of support and opposition and a profoundly different social, political and economic setting.

National Activities

On the national scene, events moved rapidly. In 1933 federal regulations were adopted defining the policies and procedures under which medical care might be given to persons receiving unemployment relief.

1934 . . . The President established a "Committee on Economic Security" to study the effects of ill health and other misfortunes.

1935 . . . The Social Security Act was passed.

1936 . . . The first compulsory health insurance bill was introduced in Congress, and the first "National Health Survey" was completed.

1937 . . . The second compulsory health insurance bill was introduced.

1938 . . . The President called a "National Health Conference" following receipt of the report of his "Interdepartmental Committee to Coordinate Health and Welfare." The third special session of the A.M.A. House of Delegates was called to establish clearly the attitude of organized medicine on the proposed Federal Government program.

1939-1947 . . . A total of seven bills were introduced in Congress, nearly one each year, calling for compulsory health insurance programs.

1948 . . . Another National Health Conference and again a recommendation for a compulsory health insurance system—this time by Oscar Ewing, Federal Social Security Administrator.

1949 . . . Bills in Congress on medical care became so numerous that keeping track of them was almost impossible.

1951 . . . The establishment of the President's Commission on Health Needs of the Nation. (It reported in 1953.)

1956 . . . Congress provided medical care for military dependents—Medicare.

1957 . . . Congress amended the Social Security Act to provide medical care for public assistance recipients.

I am sure you are familiar with events of the past two years.

The third period of the medical care insurance movement in the United States is by no means over.

Activities in California

While these events were taking place on the national scene, what about California and the California Medical Association? What events, and what actions by this House of Delegates, have led us to our present position as we enter the 1960s?

1910 TO 1920, THE FIRST PERIOD

In California, the C.M.A. refused to participate in the development of our Workmen's Compensation Law passed in 1912. Today we negotiate the fee schedule—piecemeal—with a politically appointed body.

In *1917*, our State Legislature received a report of its Social Insurance Commission which recommended compulsory health insurance; but a constitutional amendment designed to implement it in 1918 was defeated.

1921 TO 1933, THE SECOND PERIOD

1929 . . . Two meetings of the Council of the California Medical Association were devoted to considering plans for a medical care program.

1930 . . . The Graves Report to the Council of the California Medical Association, recommending a program for persons earning $2,500 or less.

1933 ON, THE THIRD PERIOD

1933 . . . The State Legislature appointed a committee to report at the next regular session on the advisability of a Health Insurance Act. At its annual meeting that same year, the C.M.A. House of Delegates instructed the Council to parallel the work of the Legislature's committee.

1934 . . . The Council reported to the House of Delegates that it favored a voluntary service type plan, rather than a compulsory one, for the people of California and recommended continuation of its study. The reference committee reviewing the Council report said:

"We agree with the Council that legislative establishment of health insurance in California would be undesirable at this time from the standpoint of the public and the profession, but we earnestly believe that if such legislation appears inevitable to satisfy the economic demand of the times, the C.M.A. should be prepared to cooperate in molding this legislation in such a manner as to preserve as nearly as may be the standards of scientific service of professional relations which are of such vital importance to the community. We cannot, however, refrain from endorsement of the fundamental principle contained in the report of the Council. We believe that perhaps the most effective means of avoiding ill-advised legislative establishment of health insurance is to offer to the community a solution of the problem on our own initiative. We believe that there are two definite lines of activity in which this Association should now engage. One, offer the community a solution of the problem in the form of a voluntary payment plan set up by this Association. Two, as recommended by the Council, adequately prepare to cooperate with preparation of legislation, if such becomes inevitable, establishing a compulsory payment plan. We believe it is

feasible to set up a voluntary plan to be operated by this Association that would later fit into a compulsory payment plan which may be established by legislative enactment."

At that same session, the House of Delegates also established a special "Committee of Five," instructing it to conduct a survey of the problem as it applies to California and to formulate a plan for the administration of health insurance and to prepare a bill for suitable legislation which would be available for presentation in the 1935 session of the State Legislature. The "California Medical-Economic Survey" had its inceptions in those actions of the House of Delegates in May, 1934.

1935 . . . On March 2 and 3, the first special session of this House of Delegates was called to consider the preliminary report of the "Committee of Five." This report contained two phases:

1. Establishment of a voluntary service plan by the Association rather than approve the establishment of compulsory health insurance.

2. Following instruction of the 1934 House of Delegates, to prepare a draft of a bill for compulsory health insurance.

By a vote of 63 to 48, this House of Delegates rejected the recommendation to establish a voluntary service plan and adopted a resolution approving cooperation with the legislature and the proposed compulsory health insurance bill.

A special committee called the "Committee of Six" was established and authorized by this House of Delegates to draft a form of compulsory health insurance act to be submitted to the California Legislature which was in session that year. This was done and the proposed law was presented to the Legislature of 1935 as Senate Bill 454 and its companion Assembly Bill, 1097. But neither bill was passed.

1938 . . . Democrat Culbert L. Olsen was elected Governor along with a strong democratic legislature. Because he was known to favor compulsory health insurance, and in light of pending federal legislation and the attitudes of the Farm Bureau, organized labor and others, the Council called the second special session of this House of Delegates on December 17 and 18. At that meeting, this House voted 101 to 4 to authorize the creation of California Physicians' Service, the first statewide plan of its type, with an income ceiling of $3,000. In so doing, this House completely reversed the position it had taken less than two years previously. It recognized a need which had to be met and took positive steps to meet it.

1939 . . . At the January 14 Council meeting, the final phases of the newly created health plan were completed and the name California Physicians' Service was formally adopted.

Governor Olsen introduced his compulsory health insurance measure which, after a long debate in the Assembly was defeated, by a 2 to 1 vote. The formation of C.P.S. had already had its first effects on state and national legislation.

C.P.S. was legally established on February 2, 1939 by the C.M.A. as a nonprofit corporation falling under the jurisdiction of Section 593A of the California Civil Code. Doctor Ray Lyman Wilbur was elected its first president, and a loan of $15,000 was provided by the C.M.A. to cover initial expenses. Thus, for the first time in the nation's history, a statewide, medically-sponsored, voluntary, nonprofit, prepaid health plan had been organized by the medical profession to meet a great social need. By December 31 of that year, (1939) C.P.S. had a subscriber membership of 5,742 people and a participating physician membership of 5,000. The C.M.A. membership at that time was 6,401. At the close of 1959 there were 781,281 subscribers, 14,300 participating physicians, and a C.M.A. membership of 16,511.

1941-1942 . . . Measures similar to that of Governor Olsen were introduced in the 1941 and 1942 sessions of the Legislature, but died in committee without a hearing.

1942 . . . Permanente Health Plan was started.

1944 . . . On December 13, Governor Earl Warren, meeting with the C.M.A. Council, stated his intention to introduce a compulsory health insurance measure in the 1945 legislature and requested the C.M.A. to inform him as to the type of plan the Association would approve. On December 29, he announced his intent in the press. The third special session of the C.M.A. House of Delegates was held January 4-7, 1945.

At that meeting, this House of Delegates reemphasized its belief in the voluntary service plan and rejected Governor Warren's proposal. The fight was on, and with only a handful of organizations supporting the California Medical Association in its opposition, Warren's proposal and that of the CIO were defeated—but this time by a margin of one vote (39-38) in the Assembly.

1946 . . . This House of Delegates received the Chandler Committee Report, recommending that C.P.S. pay all physicians the same fee, that osteopathic physicians be paid, and that strong support be given to C.P.S. This House approved those recommendations.

1947 . . . Governor Warren reintroduced his health insurance bill and again it was defeated.

1949 . . . Governor Warren again reintroduced his health insurance bill, and it was defeated again.

The C.P.S. income ceiling was raised from $3,000 to $3,600. C.P.S. had proven its political value.

1951 . . . C.P.S. paid, for the first time, 100 per cent of its fee schedule.

This House of Delegates established the C.P.S. Study Committee and raised the income ceiling to $4,200.

By this time, four and a half million people in California were covered by some form of voluntary health insurance (821,975 under C.P.S.). The state's population at the time was nearly 11 million.

1952 . . . The C.P.S. Study Committee presented its report to the House of Delegates and recommended an "average fee plan." A report by Ernest Dichter, Ph.D., who had done a study of the structure, function and effect of C.P.S., and a survey of C.P.S. by Wolf-Cochran and Linder were presented.

The terms "personal physician," "Robin Hood concept of fees" and "biological blackmail" came into being.

This House of Delegates formed the Commission on Medical Services "whose function shall be to study, keep records upon and recommend action to the C.M.A. and its correspondent bodies on all types of prepaid medical care, including C.P.S., insurance company plans, Industrial Accident Commission schedules, Union Labor plans, compulsory governmental and nongovernmental plans."

The House "Committee of Eight" reported on its efforts to develop a better fee schedule for C.P.S. That report was rejected, as the "Fry Committee" report of the previous year had been.

1953 . . . At the Interim Session of this House of Delegates on December 2 and 3, 1953, the Commission on Medical Services recommended the adoption of the "Usual Fee Indemnity Plan," and reported on its efforts to work out adjustments in the C.P.S. fee schedule. In its report at that time the Commission said: "Throughout these discussions, the Commission has steadfastly maintained that determination of relative values of fee schedule items is a prerogative of doctors alone, which they must jealously guard."

The Council approved the establishment of a subcommittee on Principles of Fee Schedules (later changed to Committee on Fees) to formulate principles for establishing fee schedules.

1954 . . . This House of Delegates authorized the C.P.S. $6,000 income ceiling on a county option basis.

The First Relative Value Study was begun by the Committee on Fees.

1956 . . . By this time approximately 30 per cent of the total United States medical expenditures was being financed by government, local, state or national.

Medicare was under consideration in Congress, and the C.M.A. Council created the Committee on Government Financed Medical Care.

The Relative Value Study was published.

1957 . . . Medicare and Public Assistance Medical Care programs were put into effect.

A revised edition of the Relative Value Study was published.

1958 . . . The House of Delegates ordered revision and updating of the Relative Value Study. And also in that year:

- Total public and private spending on health and medical care was nearly 25 billion dollars.
- Forand Bill introduced in Congress.
- C.P.S. C Schedule, for $7,200 income ceiling, was developed at request of the county societies.
- There were 14,639,000 people in California, 16,000 members of C.M.A., 780,000 people covered by C.P.S., and 14,300 participating C.P.S. physicians.
- 123 million Americans were protected against expenses of hospital care; more than 111 million against surgical expense; over 75 million against regular medical expense and more than 17 million had major medical expense insurance.

1959 . . . The California legislative auditor froze all fees paid by the state at a factor of 4 for the unit value of the Relative Value Study.

County societies approved letting C.M.A. officials use regional data from the 1958 Relative Value Survey in dealing with state government.

The Federal Employees Benefit Act was passed by Congress.

An Assembly interim committee began a study of the cost of hospitalization and medical care.

1960 . . . Governor Brown established a "Committee on Medical and Health Needs of California" which is to submit a report by November.

The question of extension of medical care as a benefit of Social Security is to be resolved in the Congress.

Since 1940, private health insurance plans have developed rapidly as alternatives to governmental programs. Giving impetus to this growth was the war-time wage stabilization program and its encouragement of medical care programs as a fringe benefit. The continuing postwar emphasis on health and welfare plans, coupled with management's increasing concern for human relations in industry, has brought about the marriage of medical care and industrial relations with a result that today the union-administered health and welfare plans represent a force of equal magnitude to that of government.

Nearly three-fifths of the 123 million people who now have some kind of prepaid health insurance have it as a part of an employee benefit plan that is paid for in full or in part by their employers, who are now contributing about a billion dollars a year.

In the dynamic social structure of our society, the new public attitudes toward medical care stem partly from the growing health-consciousness of the American people, partly from their increasing familiarity with medical potential, and partly because more people today are directly experiencing the benefits of the scientific revolution in medicine than ever before. These attitudes also stem from more education, higher incomes and greater mass purchasing power and are reflected in the fact that an increasing number of people appear to have adopted the view that adequate medical care is as much implicit in the right to life, liberty and the pursuit of happiness as is public education.

The medical profession and the public today both face the question: How can the principles of prepayment of medical costs be maintained and how can the funds made available thereby be best distributed or used to insure the maximum benefits to the majority of the public. Physicians must decide once and for all where they fit into this picture—particularly in view of the fact that physicians do not control the national economy and the total number of physicians in this country constitutes only one-tenth of 1 per cent of the voting population.

If the medical profession fails to meet its obligations, forces outside of medicine will regulate medical practice and its cost.

I would like to conclude this historical résumé by quoting from the utterances of one of this nation's great men in a time of crisis. Addressing the Congress in the gloomy autumn of 1862, Abraham Lincoln began: "Fellow citizens, we cannot escape history. We of this Congress and this Administration will be remembered in spite of ourselves. No personal significance or insignificance can spare one or another of us. The fiery trial through which we pass will light us down, in honor or dishonor, to the last generation."

Respectfully submitted,

FRANCIS J. COX, M.D., *Chairman*
Commission on Medical Services

In Memoriam

BACON, EDISON PIERCE. Died February 18, 1960, aged 52. Graduate of University of Southern California School of Medicine, Los Angeles, 1940. Licensed in California in 1940. Doctor Bacon was a member of the Los Angeles County Medical Association.

✠

FIESE, MARSHALL J. Died in Bakersfield, March 1, 1960, aged 43, of injuries received in a train wreck. Graduate of Stanford University School of Medicine, Stanford-San Francisco, 1944. Licensed in California in 1944. Doctor Fiese was a member of the Fresno County Medical Society.

✠

GARDENIER, WILLIAM H. Died in South San Gabriel, February 22, 1960, aged 49, of heart disease. Graduate of Stanford University School of Medicine, Stanford-San Francisco, 1935. Licensed in California in 1935. Doctor Gardenier was a member of the Los Angeles County Medical Association.

✠

GOODMAN, EPHRAIM FRANK. Died in Downey, February 10, 1960, aged 54, of heart disease. Graduate of University of Illinois College of Medicine, Chicago, 1933. Licensed in California in 1942. Doctor Goodman was a member of the Los Angeles County Medical Association.

✠

HERRICK, FRANK LESLIE. Died November 12, 1959, aged 71. Graduate of Oakland College of Medicine and Surgery, California, 1912. Licensed in California in 1912. Doctor Herrick was a member of the Alameda-Contra Costa Medical Association.

KONIGMACHER, ADAM H. Died November 20, 1959, aged 69. Graduate of Creighton University School of Medicine, Omaha, Nebraska, 1913. Licensed in California in 1920. Doctor Konigmacher was a retired member of the Fresno County Medical Society and the California Medical Association, and an associate member of the American Medical Association.

✠

LATON, GEORGE PEAVY. Died February 10, 1960, aged 75. Graduate of Dartmouth Medical School, Hanover, New Hampshire, 1909. Licensed in California in 1918. Doctor Laton was a life member of the Los Angeles County Medical Association.

✠

SEGAL, ROBERT. Died in Mar Vista, February 20, 1960, aged 49. Graduate of Tulane University School of Medicine, New Orleans, Louisiana, 1933. Licensed in California in 1935. Doctor Segal was a member of the Los Angeles County Medical Association.

✠

SIDERS, RICHARD C. Died in Redwood City, February 7, 1960, aged 49. Graduate of Northwestern University Medical School, Chicago, Illinois, 1943. Licensed in California in 1945. Doctor Siders was a member of the San Mateo County Medical Society.

✠

SUMNER, WILLIAM ARTELL. Died in San Francisco, February 17, 1960, aged 59. Graduate of Stanford University School of Medicine, Stanford-San Francisco, 1930. Licensed in California in 1930. Doctor Sumner was a member of the San Francisco Medical Society.

10th ANNIVERSARY

REGIONAL POSTGRADUATE INSTITUTE

SAN JOAQUIN VALLEY COUNTIES

Presented by Committee on Postgraduate Activities of the California Medical Association, in cooperation with Fresno, Madera, Kings, Tulare, Kern, Merced-Mariposa, Inyo-Mono and Stanislaus County Medical Societies and the University of Southern California School of Medicine, Phil R. Manning, M.D., Associate Dean, Postgraduate Division.

Ahwahnee Hotel, Yosemite National Park

April 28 and 29, 1960

PROGRAM

THURSDAY, APRIL 28

Morning Meetings

9:00-9:20—**Mechanism of Action of Tranquilizers**—Peter V. Lee, M.D.

9:20-9:40—**The Clinical Indications and Practical Use of Tranquilizers**—Seymour Pollack, M.D.

9:40-10:00—**Questions and Answers.**

10:00-10:20—**Surgery vs. Radiation in the Treatment of Carcinoma of the Cervix**—Charles F. Langmade, M.D.

10:20-10:40—**Fibromyomata**—George A. Macer, M.D.

10:40-11:00—**Questions and Answers.**

11:00-11:30—**Toxemia of Pregnancy**—George A. Macer, M.D.

11:30-12:00—**Habitual Abortion**—Charles F. Langmade, M.D.

12:00-12:20—**Questions and Answers.**

ELECTIVE WORKSHOPS

10:00-12:00—**Water and Electrolyte Balance**—Telfer B. Reynolds, M.D.

10:00-12:00—**Electrocardiographic Interpretation: Arrythmias**—Phil R. Manning, M.D.

Afternoon Meetings

2:00-2:30—**Intestinal Malabsorptive Syndromes** — Bernard J. Haverback, M.D.

2:30-3:00—**Ulcerative Colitis**—Bernard J. Haverback, M.D.,

3:00-3:20—**Questions and Answers.**

3:30-5:00—**Panel: Workshop in Problems of Jaundice** —Telfer B. Reynolds, M.D., Leonard Rosoff, M.D., Donald W. Petit, M.D.

7:00-8:00—**"No Host" Cocktail Party.**

8:00—**Dinner-Dance.**

FRIDAY, APRIL 29

Morning Meetings

9:00-9:20—**Psychic Energizers: Mechanism of Action**—Peter V. Lee, M.D.

9:20-9:40—**The Clinical Indications and Value of the Psychic Energizers**—Seymour Pollack, M.D.

9:40-10:00—**Untoward Effects of Some of the New Drugs**—Peter V. Lee, M.D.

10:00-10:20—**Questions and Answers.**

10:20-10:40—**Stress Incontinence**—George A. Macer, M.D.

10:40-11:00—**Problems in Pediatric Gynecology** — Charles F. Langmade, M.D.

11:00-11:20—**Questions and Answers.**

11:20-11:50—**A Practical Approach to Diagnosis of Adrenal Cortical Function**—Donald W. Petit, M.D.

11:50-12:20—**The Enlarged Thyroid**—Donald W. Petit, M.D.

12:20-12:30—**Questions and Answers.**

ELECTIVE WORKSHOPS

10:00-12:00—**Workshops in Problems of Jaundice**—Telfer B. Reynolds, M.D.

10:00-12:00—**Electrocardiographic Interpretations: Chest Pain and Hypertrophy**—Phil R. Manning, M.D.

Afternoon Meetings

2:00-2:30—**Panel: Peptic Ulcer—Medical.**

2:30-3:00—**Panel: Peptic Ulcer—Surgical.** Bernard J. Haverback, M.D., and Leonard Rosoff, M.D.

3:00-3:20—**Questions and Answers.**

3:30-5:00—**Workshop in Hypertension**—Donald W. Petit, M.D.

HOST: Fresno County Medical Society . . . **REGIONAL CHAIRMAN:** Campbell H. Covington, M.D., 2057 High Street, Selma, California . . . **INSTITUTE FEE:** $15.00. For additional information, contact Postgraduate Activities office, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5. **All California Medical Association members and their families are cordially invited to attend.**

Council Meeting Minutes

Minutes of the 456th Meeting of the Council, Los Angeles, Ambassador Hotel, February 19 to 24, 1960.

The meeting was called to order by Chairman Lum in the Regency Room of the Ambassador Hotel, Los Angeles, on Friday, February 19, 1960, at 7:30 p.m. Subsequent meetings, following recesses, were held each day from Saturday, February 20, through Wednesday, February 24, 1960.

Roll Call:

Present were President Reynolds, President-Elect Foster, Speaker Doyle, Vice-Speaker Heron, Secretary Hosmer, Editor Wilbur and Councilors MacLaggan, Wheeler, Todd, Quinn, O'Neill, Kirchner, O'Connor, Shaw, Gifford, Harrington, Davis, Sherman, Campbell, Lum, Bostick and Teall.

A quorum present and acting.

Present by invitation were Messrs. Hunton, Thomas, Clancy, Collins, Marvin and Whelan, Dr. Batchelder and Miss Regina Chadwick of C.M.A. staff; Messrs. Hassard and Huber of legal counsel; Messrs. Read, Salisbury and Fraser of the Public Health League; county society executives Scheuber, Jensen, Geisert, Somerville, Pettis, Field, Bannister, Brayer, Pearce, Donmyer, Nute, Burris, Neick, Thompson, Wood and Donovan; Doctors John Keye of the State Department of Social Welfare and Robert E. Wyers of the State Department of Mental Hygiene; Dr. Malcolm Merrill, State Director of Public Health, and Doctors A. J. Murietta Jr., Dan O. Kilroy, John Schaupp, Thomas Elmendorf, James Yant, Francis E. West, Joseph Telford, Elmer E. Wadsworth, Clark Abbott, R. Stanley Kneeshaw and others. A number of guests attended portions of some sessions of the meeting.

1. *Minutes for Approval:*

On motion duly made and seconded, minutes of the 455th meeting of the Council, held January 9, 1960, were approved.

2. *Membership:*

(a) A report of membership as of February 15, 1960, was presented and ordered filed.

(b) On motion duly made and seconded, two delinquent members whose dues had been received were voted reinstatement.

(c) On motion duly made and seconded in each instance, 29 applicants were voted retired membership. These were: Warren B. Allen, Margaret G. Zeff, Alameda-Contra Costa County; Fred Balyeat, Hans V. Briesen, Kenneth S. Davis, John O. Eiler, Alan Edward Gage, Carolyn A. Grey, Edward Wm. Hayes, Frank W. Hodgdon, William E. Hunter, Robert H. Kennicott, Sydney V. Kibby, William F. McCool, Anton H. Nerad, Lola L. Pedlow, Nevin H. Rupp, Floyd Thurber, James D. Van Buskirk, Fessenden O. Westfall, Los Angeles County; Allen K. McGrath, Napa County; Lloyd A. Burrows, Orange County; Charles C. Briner, Placer-Nevada-Sierra County; J. L. Lipe, San Diego County; Howard C. Naffziger, Martin J. Seid, San Francisco County; M. R. King, Solano County; Elizabeth L. Maximova, Sonoma County; Frank Kohn, Tulare County.

(d) On motion duly made and seconded in each instance, ten applicants were voted Associate Membership. These were: Michael L. Matte, Robert Mazet, Jr., Robert E. Tranquada, Los Angeles County; Samuel J. Ravitch, Vaughan A. Shaw, Napa County; Frank Cline, Jr., Christopher Leggo, Irene K. Mugford, Suzanne Snively, Sacramento County; Elmer M. Bingham, San Diego County.

(e) On motion duly made and seconded in each instance, 17 members were granted reductions of dues because of prolonged illness or postgraduate study.

3. *Financial:*

(a) A proposed budget for the fiscal year to start July 1, 1960, was presented and discussed. This item had been considered at the January meeting and action deferred prior to submitting the budget to the House of Delegates. On motion duly made and seconded, the budget as presented was approved for submission to the House of Delegates; dues for the calendar year 1961 were approved at $70 per active member.

(b) Reports on current cash balances, on income and expenditures for the seven months ended January 31, 1960, and on balance sheets for the Association and its allied organizations were presented and ordered filed.

(c) Chairman Lum announced that Pacific Magnetic Tape Equipment Co., wholly owned by the Association, had paid a second dividend of $900 to the Association.

(d) Consideration was given to two requests received from Student A.M.A. chapters in the state. One suggested that four representatives of a chapter be sent at C.M.A. expense to the national Student A.M.A. meeting; the second requested funds to establish a hospitality headquarters at the 1960 annual meeting of the organization at a cost of about $1,300. On recommendation of the Finance Committee and on motion duly made and seconded, it was voted to deny both requests.

4. *House of Delegates Business:*

(a) A resolution prepared by the Committee on Mental Health, relating to the availability of records

in cases of voluntary commitment, was discussed; the committee recommended opposition to proposed legislation which would make such records public property. On motion duly made and seconded, it was voted that the Council introduce a resolution in the House of Delegates asking such opposition.

(This was resolution No. 69, which was approved by the House of Delegates.)

(b) A By-Law amendment prepared by the Section on Public Health was presented. This would call for a change in name for the section and Council sponsorship was sought. On motion duly made and seconded, it was voted to refer this proposal to the Committee on Scientific Work.

5. *Television Program:*

Dr. John Schaupp of the San Francisco Medical Society outlined a series of television programs sponsored by the society, eight further showings to be made. He asked that the Association allow the use of its name as approving the program, without cost. On motion duly made and seconded, it was voted to approve this request.

6. *Physician-Hospital Relationships:*

On motion duly made and seconded, the Council affirmed its approval of a set of guiding principles for physician-hospital relationships.

7. *Report of the President:*

President Reynolds reported on a conference on problems of the aging, sponsored by the American Medical Association and held in San Francisco on January 20 and 21, 1960.

8. *Social Welfare Medical Programs:*

(a) Dr. Sherman gave a progress report for the Liaison Committee with the State Department of Social Welfare.

(b) A letter from Dr. Russell Ferguson, public health director from Santa Cruz County, was presented, showing that a grant of $115,000 had been received by his department to study a program to provide certain hospital, surgical and dental services for old-age security recipients. He asked that a physician be named as a member of a consultant group and that staff assistance be provided. On motion duly made and seconded, it was voted to name a member of the Liaison Committee to the State Department of Social Welfare as a consultant and to authorize staff assistance.

(c) Mr. Richard Lyon of California Physicians' Service filed a progress report on the work of his staff in assisting county medical societies in their programs for the aged.

9. *Commission on Community Health Services:*

(a) Dr. MacLaggan presented a report of the Joint Council for the Aged on the subject of nursing homes. On motion duly made and seconded, this report was approved.

(b) Dr. MacLaggan also presented a report on the evaluation of school physical education programs. On motion duly made and seconded, this report was approved.

10. *Commission on Public Policy:*

(a) Committee on Public Relations: Dr. Kilroy presented copies of a pamphlet designed to augment opposition to legislative proposals such as the H.R. 4700 measure now before the U. S. Congress. Copies are to be distributed widely.

(b) Dr. Kilroy reported that an interim committee of the State Senate was investigating the merchandising of hearing aids and suggested cooperation with this committee. On motion duly made and seconded, it was voted to cooperate with this committee and to assist it in securing testimony from qualified otologists.

11. *Commission on Medical Services:*

(a) Dr. Cox presented for Council consideration a report of the Committee on Foundations. No action taken.

(b) Dr. Cox also reported on meetings held with representatives of the Health Insurance Council on development of a single claims form to be used by all. The HIC representatives reported progress on development of such a form, which will be presented to the Commission for approval.

(c) Dr. Cox also presented a supplementary report of the Commission covering a digest of history of socio-economic developments over a long period of years. This report has been presented to the House of Delegates.

12. *Commission and Committee Appointments:*

Dr. Bostick presented a list of proposed appointments to commissions and committees. On motion duly made and seconded, this list, as amended, was approved for presentation to the House of Delegates.

13. *Commission on Professional Welfare:*

Dr. Kirchner reported that a pamphlet prepared to encourage tetanus immunization had reached a circulation of more than 1,000,000 copies.

14. *Committee on Scientific Work:*

(a) Dr. Daniels reported on a meeting held with officials of pharmaceutical producers on the subject of postgraduate courses for physicians. Further conferences are to be held.

(b) Dr. Wilbur gave a progress report for the ad hoc committee to study C.M.A. programs in continuing education and scientific activities.

15. *State Department of Public Health:*

(a) Dr. Bostick presented a proposed letter to the State Department of Public Health on the treatment of rabies. On motion duly made and seconded, this letter was approved to be sent for limited distribution through health department channels.

(b) Dr. Malcolm Merrill introduced Dr. Harold Erickson, newly appointed deputy director of the department, and gave a progress report on influenza, air pollution and animal experimental research.

6. *Uniform Claims Forms:*

Dr. Joseph Telford reported further on discussions held with Health Insurance Council representatives on the development of uniform claims forms. (See item 11(b) above.) He suggested that the Health Insurance Council be allowed to run a pilot study in selected counties for the balance of the year. On motion duly made and seconded, this proposal was approved.

17. *Committee on Insurance:*

Dr. Homer Pheasant reported that the underwriters of the group disability insurance program had proposed making available additional coverage to double the benefits already provided under this policy. On motion duly made and seconded, it was voted to present this proposal to the Medical Executives Conference before giving it further consideration.

18. *Heart Center:*

Dr. MacLaggan presented a proposal that approval be given to the establishment of a heart center in Sharp Hospital, San Diego. On motion duly made and seconded, it was voted to refer this proposal to the Commission on Public Agencies.

19. *Death of Doctor William Gardenier:*

On motion duly made and seconded, it was voted to express to the family of Dr. William Gardenier, associate medical director of California Physicians' Service, the sympathy of the Council on his death the day previous.

20. *Honor to Former Councilor:*

A certificate of appreciation was presented to Dr. Robert O. Pearman in recognition of his services as a Councilor during the years 1953 to 1959.

21. *Dates for 1961 Annual Session:*

On motion duly made and seconded, it was voted to establish the dates for the 1961 Annual Session in accordance with action to be taken by the House of Delegates on resolutions offered on this subject. (Set for 1961 in Los Angeles, April 30 to May 3.)

22. *Resolutions for Council Introduction:*

Dr. Campbell expressed dissatisfaction with requests placed before the Council to introduce resolutions into the House of Delegates in behalf of sections or other organizations. On motion duly made and seconded, it was voted to direct the staff to consider this problem and suggest techniques for handling such requests.

23. *Farewells by Retiring Councilors:*

Drs. Lum and Harrington, both retiring as members of the Council, expressed their regrets at leaving the Council and the remaining Councilors gave both a standing ovation and expressions of great appreciation for their valuable services.

Adjournment:

There being no further business to come before it, the meeting was adjourned on Wednesday, February 24, 1960, at 9:00 a.m.

DONALD D. LUM, M.D., *Chairman*
MATTHEW N. HOSMER, M.D., *Secretary*

' ' '

457th Meeting

Minutes of the 457th Meeting of the Council, Los Angeles, Ambassador Hotel, February 24, 1960.

The meeting was called to order by vice-chairman Sherman in the Frenchette Room of the Ambassador Hotel, Los Angeles, on Wednesday, February 24, 1960, at 6:45 p.m.

Roll Call:

Present were President Foster, President-Elect Bostick, Secretary Hosmer, Editor Wilbur and Councilors MacLaggan, Wheeler, Todd, Quinn, O'Neill, Kirchner, O'Connor, Shaw, Rogers, Gifford, Murray, Davis, Miller, Sherman, Campbell, Morrison and Teall.

A quorum present and acting.

Present by invitation were Messrs. Hunton, Thomas, Clancy, Marvin, Whelan and Collins of C.M.A. staff; Messrs. Hassard and Huber of legal counsel, and others.

1. *Introduction of New Members:*

The chairman introduced President-Elect Bostick and new members of the Council, including Wilbur G. Rogers of Glendale, John F. Murray of Fresno, Albert G. Miller of San Mateo and John G. Morrison of San Leandro.

2. *Election of Officers:*

(a) On nomination duly made and seconded, Samuel R. Sherman was elected Chairman.

(b) On nomination duly made and seconded, Ralph C. Teall was elected Vice-Chairman.

3. *Administrative Appointments:*

On motion duly made and seconded in each instance, the following appointments were voted:

Secretary	Matthew N. Hosmer
Editor	Dwight L. Wilbur
Executive Secretary	John Hunton
Legal Counsel	Peart, Baraty & Hassard

4. *Appointment of Councilor:*

On motion duly made and seconded, Dr. Carl E. Anderson of Santa Rosa was appointed a member of the Council to succeed Dr. Warren L. Bostick until the next meeting of the House of Delegates.

5. *Committee Appointments:*

On motion duly made and seconded, in each instance, the following one-year appointments to special committees were voted:

Finance Committee — Heron, chairman; Teall, Davis, Foster, Gifford.

C.P.S. Board of Trustees—Heron, Shaw, Davis.

Advertising Committee—Robertson Ward, W. Dayton Clark, Allan T. Hinman, Eugene S. Hopp, Ralph W. Weilerstein.

Advisory Committee to Auxiliary—Sherman and Todd, to serve with President, President-Elect and Secretary.

Liaison Committee with Hospital Association—MacLaggan, chairman; E. E. Wadsworth, Bert Halter.

Ad Hoc Committee on Continuing Education and Scientific Activities—All members reappointed—Dwight L. Wilbur, chairman; Donald A. Charnock, Werner F. Hoyt, William P. Longmire, Jr., Clayton G. Loosli, G. E. Norwood, Lowell A. Rantz, John B. deC. M. Saunders, Joseph W. Telford.

Joint Council to Improve Health Care of the Aged—Angus C. McDonald and Pierre Salmon, reappointed for two-year terms, expiring 1962.

Audio-Digest Foundation—Gordon Beckner, William D. Evans, Paul D. Foster, Ivan C. Heron, Donald D. Lum, Robert L. Marsh, Omer W. Wheeler, Thomas H. Brem, Paul D. Foster, Mr. K. L. Hamman, Mr. Claron Oakley.

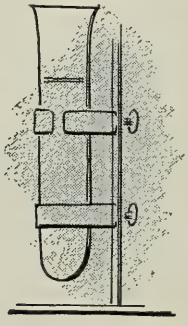
Bureau of Research and Planning—Lyle Craig and Werner F. Hoyt reappointed for five-year terms expiring 1965.

Committee on Committees, Liaison Committee with State Bar, Advisory Committee to California Medical Assistants Association—Action deferred to next Council meeting.

Adjournment:

There being no further business to come before it, the meeting was adjourned at 7:15 p.m.

SAMUEL R. SHERMAN, M.D., *Chairman*
MATTHEW N. HOSMER, M.D., *Secretary*



PUBLIC HEALTH REPORT

MALCOLM H. MERRILL, M.D., M.P.H.
Director, State Department of Public Health

A study of medical and health care provided to Old Age Security recipients in a California county is one of two local study projects approved by the State Health Department.

Purposes of the project are to analyze medical, social and economic characteristics of these persons and to measure the utilization, cost and resources of payment for medical and health services provided to these individuals.

The second project is concerned with a study of the problem of providing continuous nursing care between hospital and home, as the patient moves from home to hospital and again to his own home. It seems clear that maximum benefit is obtained for the patient when there is definite provision for the nursing care in the home following a hospital stay, and it is also clear that proper care in the home often permits shortening of hospital stay.

The problems of providing such continuous care, properly coordinated to the best medical advantage, is one which will be studied by an actual demonstration in a California community.

* * *

A new and simplified test which may weed out many suspected false positive reactions to tests for syphilis was demonstrated recently to personnel from 30 local health departments in a workshop sponsored by the Microbiology Laboratory. They were instructed in the technical performance and the clinical usefulness of the Reiter protein complement fixation test, with the hope it can supplant the expensive Treponemal immobilization test, which is the standard reference test.

The test is still in the advanced experimental stage and needs final evaluation as to sensitivity and specificity.

* * *

For more than three years, the Department has been providing limited consultation services relative to problems of hospital infections. During these years 90 of the 465 Class I general hospitals in California have used this service.

To determine if compulsory reporting procedures would enhance control measures, the California Conference of Local Health Officers requested the department to conduct a pilot study. The department has selected seven hospitals from over 20 that volunteered to participate in the six-month study. The hospitals selected include both large and small, and private and public hospitals, to a total of 1,200 beds.

Reporting will be requested for all hospital infections, including those caused by Gram-positive and Gram-negative organisms. Within the limits of staff time available, epidemiologic assistance in the investigation of hospital outbreaks of infection will be provided by the Bureau of Acute Communicable Diseases. As an additional aid, limited determinative bacteriologic and phage typing of Staphylococci may be done by the Division of Laboratories.

* * *

Influenza in California has been on the decline since mid-February. However, the number of deaths reported by the eight cities in the surveillance system continues to be greater than the expected number based upon previous experience.

While not all these eight cities have shown the dramatically sharp increase which Los Angeles experienced, they all have reported more deaths during the first nine weeks of this year than during the comparable period in 1959.

Berkeley and San Francisco reported small increases, while Long Beach, Los Angeles, Oakland, Pasadena, Sacramento and San Diego reported between two and five times as many deaths this year as during the like period last year.

The nine-week total of deaths in these eight cities numbered 734, as compared with 277 and 398, respectively, for the comparable periods in 1959 and 1958.

An analysis is currently underway of all deaths due to pneumonia and flu which have occurred in California during January. However, since there is a lag between date of death and the availability of death certificates for such a study, the results are not ready at this time.

Because the recent wave of influenza apparently had its greatest impact, as to both illness and death, in the Los Angeles area, some provisional mortality data have been obtained through the cooperation of the Los Angeles city and county health departments.

Of the 345 deaths due to pneumonia and influenza recorded in the city during the first six weeks of this year, 264 were attributed to pneumonia and 81 to influenza. The deaths were about evenly divided between the sexes. More than one-half of the deaths were in persons over 70 years of age.

The Doctor in the Middle

Where Does the Physician Stand—in Law and in the Patient's Eyes—When He and the Patient's Insurance Company Disagree on Whether a Fee Is "Reasonable or Customary?"

The following letter, written by legal counsel for the California Medical Association in reply to a specific inquiry made by the medical insurance committee of a county medical society, bears upon a point of general interest to physicians.

. . . . You inquire whether, under major medical insurance policies, the patient remains liable for any unpaid balance of the fee remaining after the insurance carrier has paid its contractual liability.

I believe that an adequate answer to your question requires a review of the legal basis on which physicians' fees are erected, as well as the legal rights and duties of insurance carriers under various types of health insurance contract. Please bear with me.

1. *Physician and patient—fees:*

As between physician and patient and absent any other factor or person, the law applicable to fees is as follows:

(a) *Express contract:* Either in advance of services or thereafter a physician and patient may enter into an express contract (oral or written) fixing the physician's fee, and such a contract is legally enforceable *unless* it was entered into by the patient under duress, coercion, misrepresentation or other circumstances amounting to fraud. Such a contract need not be in writing, although if it is oral there is always the possibility of subsequent dispute as to its terms.

(b) *Absence of express contract:* If an express contract has not been entered into, then the law *implies* a promise on the part of the patient to pay a "reasonable fee." The law defines the term "reasonable" or "reasonable value" as being the result reached after giving effect to four factors, viz. customary charges in the community for similar services, the time and attention involved, the professional standing and skill of the physician and, finally, the ability of the patient to pay. In the event there is a dispute between physician and patient and a suit for fees is instituted, the foregoing are the legal factors that the court will take into account in reaching a decision.

(c) *Special circumstances:* There are situations in which a physician's fee is fixed by law or third party contract. A physician undertaking an industrial case at the instance of an employer or employer's insurance carrier is legally bound to arrange a fee with the employer or insurer. A physician may expressly contract to accept a given fee, as in the instance of C.P.S. physician membership. The patient may have a benefit that is only available to the patient if the physician accepts such benefit as full payment, as in the case of Medicare. These are all special circumstances.

2. *Insurance against physicians' fees:*

(a) The ordinary health insurance contract is one in which the insurance carrier agrees with the insured (patient) to pay fixed amounts (e.g. appendectomy, $150) in the event the insured incurs expense for covered services. This is a contract *exclusively* between the insurer and the insured; unless the physician gives his express consent, the indemnity payment does not govern his fee.

(b) *Major medical insurance:* Commencing about five years ago, insurance carriers began to issue contracts not specifying specific indemnities but instead containing a clause under which the insurer agrees to pay all or a percentage (e.g. 80 per cent) of "the reasonable and customary" fee for the service rendered. This so-called open-end or "comprehensive type" of contract requires the insurance carrier to make a decision in each claim as to what is "reasonable and customary."

It was this type of contract that was the subject of Insurance Commissioner McConnell's letter that was published by the Los Angeles County Medical Association *Bulletin** and which you attached to your letter. Mr. McConnell points out that since the insurance carrier has agreed only to a pay a "reasonable and customary" fee, the carrier is not bound by any express contract that may be entered into between the patient (insured) and the physician. This is unquestionably on the theory that the express contract may not coincide with that which is "reasonable and customary." By the same token,

*December 3, 1959, page 15.

the physician is not bound by the insurance carrier's decision of what is "reasonable and customary," because the physician is not a party to the contract between the insurer and the insured (patient). If a physician has made an express contract (absent fraud or other legal impairment) such express contract is still valid and enforceable, regardless of the existence of a major medical type insurance policy.

The real problem arises when there is a difference of opinion between the insurance carrier and the physician as to what is "reasonable and customary." While under the law this is the proper test for the physician to use (absent an express contract), and under the insurance contract is the proper test for the insurance carrier to use, it is quite possible and often happens that the two do not agree on the conclusion. This impasse on occasion causes the middle party, viz. the patient, to be completely confused, as he receives conflicting opinions from two sources, with *both* of whom *he* does have a contract.

Legally, both the insurance carrier and the physician have the right to set forth that which they consider to be "reasonable and customary," and the patient (insured), if he disagrees, then has the right to cause the issue to go to court, where the tests that I outlined above would be applied. This procedure is obviously untenable for the continuing good relations of both the insurance industry and Medicine, but under the contract terms used in major medical contracts it is an inevitable situation.

Legally, as stated, the physician is not bound by the insurance carrier's decision as to what is reasonable and customary. Practically, physicians frequently find themselves in a defensive position with their patients, because the insurance carrier decided on an amount less than that charged by the physician.

I believe it is essential that some solution be found to the problems created by two entirely different persons making an independent decision on the same point. I hope that your committee may be able to assist in this solution.

Deductibility of Traveling Expenses

PHYSICIANS TODAY are frequently importuned to sign up for "tours" or "postgraduate courses" in foreign lands under the suggestion or statement that the expenses of the trip are an allowable tax deduction. While other professional and business men are similarly lured by the promoters of such trips, the physician is a prime target because (1) he usually plans a more leisurely vacation than many, (2) he is constantly interested in advancing his scientific knowledge and (3) he can generally afford the cost of overseas or distant travel.

While this type of promotion has been going on, the Internal Revenue Service has been tightening up its restrictions and its requirements to qualify expenses of this type of travel for tax-deduction purposes. This is one of the many areas of "tax loopholes" which the IRS is seeking to plug. Unfortunately, some physicians have learned this the hard way.

Section 162 of the Internal Revenue Code of 1954 makes express provision for the deductibility of certain expense items which are classed as "ordinary and necessary expenses paid or incurred during the taxable year in carrying on any trade or business." Such expenses include "traveling expenses (including the entire amount spent for meals and lodging) while away from home in the pursuit of a trade or business."

Please note that the expense must be *ordinary*, that it must be *reasonable*, that it must be *necessary*, that it must be *incurred away from home* and that it must be *in pursuit of business*. Unless a physician's travel expenses meet *all* these requirements, they are not legally tax-deductible.

"Away from home" in this section of the law means away from your normal place of business, the word "place" embracing the general area where your business is transacted. "Overnight" means that the extent of the business must be great enough to require the taxpayer to be forced to seek sleep in another area as a relief from duty.

We are speaking here of travel expenses, not the ordinary expenses of carrying on a medical practice, such as maintaining an automobile. The latter is, of course, a deductible business expense.

"Pursuit of business" means that the taxpayer must prove that his travel expenses are directly connected with, incident to and proximately resulting from his business or profession. Further, he must prove that such expenses were necessary or appropriate to the development or pursuit of his business. Even though such expenses may be claimed as deductibles, they will not be allowed if the real purpose of the trip appears to be for personal pleasure or vacation purposes.

This aspect of the tests for deductibility is likely to plague physicians who travel to another continent, attend medical meetings or lectures while overseas and engage in sight-seeing or other personal pursuits during the course of the same visit. The IRS investigators will want to know how much time the entire trip occupied, how much of that time was spent in *bona fide* professional pursuits and how much in

personal pleasures. If the weight tends toward the personal, the agent may disallow the entire deduction claimed, on the ground that the trip was primarily for personal pleasure. If there seems a reasonable amount of time spent on professional pursuits which meet the basic tests outlined above, the agent may allow a portion of the deductions claimed. There is no set rule on this point.

Where a wife travels with the physician, her expenses are not *deductible* unless real proof can be shown that her presence was necessary and served a *bona fide* business purpose. The fact that the wife made or typed notes or performed other incidental services is ordinarily inadequate proof for tax deductions.

The cost of such items as laundry, valet service, business entertainment and taxi fares to reach eating places other than the place of residence in a city on your itinerary may not be deducted.

Typical tours promoted among physicians include the "30-day trip to Europe with medical meetings scheduled in London, Paris, Rome and Bonn." Even though medical meetings may take place in such cities on an itinerary, the primary purpose of the trip may be ruled a vacation and all expenses disallowed. Another form of such trips has been the "floating seminar" where passenger ships are used as mobile classrooms while traveling to and from distant points. Such trips are usual in the winter months, when overseas travel is at a low ebb and ships are available.

No concise statement on this subject can cover the many angles which may be presented. It is our hope here to set out only the basic tests which Internal Revenue Service may use in evaluating travel expenses which are claimed as tax deductions. Where a physician is contemplating such travel, he will do well to apply these tests fairly in advance to determine whether or not his expenses will really be allowed as deductions. He will also do well to document his deduction claims with dated receipts showing the nature and necessity of the expense—and, finally, to expect that the Internal Revenue Service will go over his deduction claims extremely carefully.

Blood Alcohol Test

Legal Effect of Participation

HOWARD HASSARD, San Francisco
Peart, Baraty & Hassard
General Counsel, California Medical Association

THE SCOPE of this opinion is limited to the possible liability of a physician performing a blood alcohol test upon a person, assuming that the physician is not charged with negligence.

Assault and battery and false imprisonment would be the theory of legal liability upon which a physician or surgeon would be held to respond in damages for performing a blood alcohol test.

FALSE IMPRISONMENT

False imprisonment is the unlawful violation of the personal liberty of another in which an essential element is the restraint of the person.

"All that is necessary is that the individual be restrained of his liberty without any sufficient complaint or authority therefor, which may be accomplished by words or acts which the individual is afraid to disregard. Mere temporary detention is sufficient, and the use of actual physical force is not necessary." 22 Cal. Jur. 2d 38.

ASSAULT AND BATTERY

An assault is defined in law as any unlawful offer or attempt to injure another with apparent present ability to effectuate the attempt under circumstances creating a fear of imminent peril. A battery is defined in law as the willful touching of the person of another and has been said to be the consummation of the assault, 6 C. J. S. 796. However, consent to or participation in the acts causing the injury by the injured party are a defense to an action for assault and battery.

It has been said: "A medical or dental surgeon who performs an operation without the consent of his patient is guilty of a battery." 4 UCLA L R 627.

Clearly, then, absent a legal consent, the withdrawal of blood for a blood alcohol test would constitute an assault and battery.

EXPRESS CONSENT

When a patient knowingly consents to a procedure no liability will attach absent negligence in the performance of a procedure. The law is stated in 86 C J S 930 as follows:

"Where a person has voluntarily manifested a definite assent to conduct which would be violative of his rights in the absence of consent, such conduct, in view of the assent, infringes no right and constitutes no tort. In order to sustain this defense, however, there must be a true assent, and a claimed assent which is not voluntary, or which is given by one incapable of assenting, is insufficient."

IMPLIED CONSENT

In certain situations where an emergency arises or where certain unanticipated conditions arise calling for immediate action and making it impracti-

cable to first obtain an express consent, the law will imply a consent.

In *Preston* v. *Hubbell* (1948), 87 CA 2d 53, the defendant was engaged to remove an impacted wisdom tooth under anesthesia. During the operation a fracture of the jaw occurred. While plaintiff was still anesthetized, defendant repaired the fracture. One of the issues raised was that the fracture was repaired without the plaintiff's express consent. The court held:

"When defendant was employed to extract the tooth, there was no discussion of other services that might be required and, since plaintiff was unconscious while the jaw was being repaired, she did not give express consent to that operation. The question is whether plaintiff's employment of defendant to remove the tooth was implied consent to the repair of her jaw that was broken during the operation, or in other words, whether plaintiff did not impliedly consent to the performance of such emergency work as became necessary in order to completely repair a condition that developed during the operation. We think the only rational answer to this question is that plaintiff must be deemed to have consented to the repair of the fracture. Defendant either had to reduce the fracture while plaintiff was unconscious or wait until she became conscious and then request her consent to the repair of the damage. It was necessary that the broken jaw be repaired promptly. Making the repair was as much in the line of defendant's professional work as was the extraction of the tooth. No reason is suggested why defendant would not have been requested to make the repair if plaintiff had been in condition to be consulted."

The court then stated that it is the general rule in cases of emergency, or unanticipated conditions where some immediate action is found necessary for the preservation of the life or health of a patient and it is impracticable to first obtain consent to the operation or treatment which the surgeon deems to be immediately necessary, that the surgeon is justified in extending the operation to remove and overcome such conditions without the express consent of the patient.

In *Wheeler* v. *Barker*, 92 CA 2d 776 (1949), the court held that:

"When a surgeon is confronted with an emergency or an unanticipated condition and immediate action is necessary for the preservation of the life or health of the patient and it is impracticable to obtain consent to an operation which he deems to be immediately necessary, it is his duty to do what the occasion demands within the usual customary practice among physicians and surgeons in the same or similar localities and he is justified in extending the operation and in removing and overcoming the condition without the express consent of the patient."

ABSENCE OF CONSENT

When a physician penetrates tissue or otherwise physically makes contact without the consent of the patient, this physical contact constitutes an assault and battery.

In *Ehlan* v. *Burrows* (1942) 51 CA 2d 141, the defendant removed three sound teeth without the consent of plaintiff or her husband and without any necessity therefor in order to save her life or to meet an extreme emergency. The court stated:

"The removal of the three sound teeth without consent, has been held to constitute an assault."

In *Valdez* v. *Percy*, (1939) 35 CA 2d 485, an enlarged gland the size of a small egg in the right axilla was found and it was suggested it should be examined for tumor. The pathologist report indicated cancer and the physicians and surgeons proceeded with a radical mastectomy. In this case, the court stated:

"The evidence as to whether the plaintiff authorized the defendant doctors Percy and Hankins to remove her breast was, to say the least, in conflict, and should have been submitted to the jury. Whether a condition arose and was discovered during an authorized operation for the removal of plaintiff's enlarged axilla gland under her right arm, and which condition required another operation to remove her right breast, was also one of fact in connection with which the testimony was conflicting, and should have been determined by the triers of fact. *It is firmly established as the law that where a person has been subjected to an operation without his consent, such an operation constitutes technical assault and battery.*" (Emphasis ours.)

The statement in 4 UCLA L R at page 627 and 635 is pertinent:

"A medical or dental surgeon who performs an operation without the consent of his patient is guilty of a battery. . . . The majority and California rule is that in the absence of emergency, a doctor cannot extend an operation without the consent of the patient. The courts have refused to accept the defense of consent implied in law, . . ."

KNOWING CONSENT

What constitutes a "knowing consent" to avoid liability is an important question. In *McCue* v. *Clein*, 60 Texas 168, 169, 48 AMR 260, the court stated:

"Even in cases where no breach of the peace is involved and the act to which consent is given is a matter of indifference to the public order, the maxim of *volenti non fit injuria* presupposes that the party is capable of giving assent to his own injury. If he is divested of the power of refusal by reason of total or partial want of mental faculties, the damage cannot be excused on the ground of consent given. A consent given by a person in such condition is equivalent to no consent at all,—more especially when his state of mind is well known to the party doing him the injury."

It might be noted that in this same case the court held that *intoxication incapacitating a person from assenting defeats a defense based upon assent.*

The case of *People* v. *Rochin* (1950), 101 CA 2d 140, is a case very similar to that which would be presented by an action for assault and battery resulting from the taking of blood for blood alcohol tests. In this case the officers of the law without a search warrant broke into the bedroom of the defendant and observed the defendant swallowing two cellophane covered capsules. The defendant was placed in handcuffs and taken to an emergency hospital where a doctor's assistant strapped the handcuffed defendant to the operating table. A doctor

then placed an empty pail by the defendant, placed a tube down the defendant's throat and released a white chemical solution into the tube and into the defendant's stomach. The defendant vomited into the pail and the two capsules in cellophane floated in the pail. These capsules were then taken from the pail and delivered to the chemist in the sheriff's office. The District Court of Appeal held that the evidence thus illegally obtained was admissible and sufficient to sustain a conviction. However, the United States Supreme Court has reversed this decision. The language of interest to us in this matter was obiter dictum of the California District Court of Appeal at page 143 of the opinion cited which reads as follows:

"This court does not approve the conduct of deputy sheriff Jack Jones and deputies Smith and Shelton who were with him at defendant's home. Under the record here, they were guilty of unlawfully breaking into and entering defendant's room and were guilty of unlawfully assaulting and battering defendant while in the room. Under the record here, deputy Jack Jones and the alleged doctor of medicine, Mier, were guilty of unlawfully assaulting, battering, torturing and falsely imprisoning the defendant at the alleged hospital. A remedy of defendant for such high-handed reprehensible conduct is an action for damages. It would appear that the sheriff should review the qualifications of said deputies to be entrusted with the authority of public office. Also, it would appear that the qualifications of said Mier as an ethical doctor of medicine should be reviewed."

This language of the District Court of Appeal of the State of California clearly indicates what the attitude of the court would be should the matter have been brought before them on an action for assault and battery.

NO DUTY TO PERFORM

No person or officer has the legal right to force a physician to perform the act of drawing blood as required in a blood alcohol test if he does not desire to do so. The case of *People* v. *Duroncelay* (1957) 48 C 2d 766, in no way can be used as authority for this proposition. Further, this case is no protection to a physician or surgeon who is being sued for damages on the theory of assault and battery or false imprisonment. This case simply states that the evidence so obtained can be used in court against the person being charged with the criminal act. No protection is extended to the doctor who in any way has become involved in the taking of the blood sample and who is being sued in a civil action.

SUMMARY

No legal liability will arise when an express consent knowingly given is obtained. In an emergency as discussed above, the court will imply a consent. Borderline cases of questionable liability would be those where a consent has been obtained but factually the issue of *knowing consent* is raised. At the other end of the continuum we have the situation of clear liability for assault and battery and possibly for false imprisonment when no consent from the patient is obtained.



Farewell—and Hail!

Vale!

IT IS A PRIVILEGE to come before you this evening to tell you, in a few words, our Auxiliary story; when and why we were organized, our projects and accomplishments.

Our California Auxiliary was organized in 1929. At the end of the first year there were ten county auxiliaries in the state with a membership of 472.

Today we have 34 component auxiliaries and 11 of our unorganized counties are represented by members-at-large, giving us a total membership of 6,712. California has the largest auxiliary in the United States; Texas ranks second and Pennsylvania third.

The prime objective of our Auxiliary is to assist the California Medical Association in its program for the advancement of medicine and public health. We carry out this objective through our Auxiliary projects. A few of these are:

1. Our American Medical Education Foundation program. Each year the county auxiliaries raise money in various ways—benefits, dues, memorials, cards of appreciation as well as individual contributions—for A.M.E.F. In 1958 we contributed $7,583, in 1959 $8,129, and to date this year we have $10,173 in this fund. By the end of June we hope to exceed $12,000 as our gift to help keep the medical schools free from government intervention.

2. Physicians' Benevolence—your own project, to help your own who are in need of assistance. Last year our contribution was $2,430. At this time this year we have collected $2,751 for Physicians' Benevolence.

3. Our Nurse Recruitment and Para-medical Careers program. When the medical profession asked the Auxiliary to assist in relieving the acute shortage of nurses, many of the county auxiliaries set up scholarship or loan funds to help student and graduate nurses through their training. This year we have 25 counties offering nursing scholarships, and two are offering scholarships in allied fields of medicine. There are over 200 Future Nurse Clubs or Career clubs sponsored by the counties in their local high schools. Well over $91,000 has been given in scholarships since this program was started in 1949.

All of our efforts are not spent on money-raising projects; our legislative chairman has made certain that every county auxiliary is well informed on the Forand Bill. Many of our members have written to their congressmen asking them to vote against this bill.

The State Civil Defense chairman worked diligently this year to alert the counties to the need for preparedness. Her advice: Be Informed! Be Prepared! Be Resourceful! Be Organized!

Through Community Service, each county auxiliary has been asked to carry out a program to meet the local health needs. Through the choice of community projects in health, our members can render a service to the community, thereby promoting good public relations.

This year we were asked to assist the California Medical Association in its program for the aging. Some of the county auxiliaries are laying the groundwork for "Visiting Homemaker Service" in their communities, others are helping in the programs that are already established.

We have accomplished all this with only 38 per cent of our potential, for while there are 17,060 members in the California Medical Association, we have only 6,712 Auxiliary members. Numerically, California has the largest auxiliary, but proportionally Texas tops us with a 78 per cent membership. Think of what we could do—if we had a membership of 100 per cent! The fact that you delegates are here this evening tells me that you are key men and interested in your county medical society. Will you please use your influence and alert your county society to the need for increasing Auxiliary membership? There are over 10,000 doctors' wives in the organized counties who are eligible for membership.

Address by Mrs. Theodore A. Poska before the California Medical Association House of Delegates at the 89th annual meeting in Los Angeles on February 20, 1960.

We greatly appreciate the assistance we receive from the California Medical Association. Our publication, *The Courier*, is the outstanding auxiliary bulletin of its kind and we are grateful to the C.M.A. for financing and publishing this magazine; also for the financial assistance we receive to help defray the cost of our annual meeting.

My sincere thanks to Dr. Reynolds and the members of the Auxiliary Advisory Board for their interest and guidance, to the C.M.A. staff for their assistance through the year and to all the others who have made my year as president such a pleasant one.

Ave!

As I speak to you for the first time as your President, I am filled with mixed emotions. The emotion of humility is engendered by the confidence which you have placed in me. The emotion of happiness is expressed by the opportunity to serve you.

Any individual assuming the high office of presidency of any organization should have conceived certain ideals and goals which she hopes to accomplish during her term in office. And, with these goals established, a comprehensive program must be planned to accomplish these objectives, and careful consideration must be given to ways and means of implementing them.

High on the list of the goals that I hope to attain is the stimulation of interest in the Auxiliary. As you all know, this is synonymous with, and results in, an increase in Auxiliary membership. How can this be accomplished? Certainly such interest can be stimulated by a continuing emphasis on every project assigned to our state and county auxiliaries. Equally important, I believe, is the necessity to push forward into new fields of endeavor. Ours must be a progressive, energetic and active organization. There should be, then, continuity from year to year in our activities, augmented by a program of realistic expansion. Interest in our Auxiliary, I believe, can be stimulated by a more enthusiastic emphasis on our present projects and a continuing constant awareness of the new socio-economic problems which challenge medicine today. These problems, we all know, are constantly facing our husbands and for that reason they become our problems too. To meet this challenge, the Auxiliary must be everywhere at all times. In no area of this challenge should our efforts be allowed to wane. We must keep pace with the constantly changing trends in the social and economic aspects of medicine and, better yet (with our woman's intuitive sense), anticipate these problems and stay one jump ahead of them.

Another goal which I hope to attain is that of the dissemination of information. Certainly "one's judgment can never be better than one's information," and I would like to say at this point that this shall be my motto for the year. Contained in that short sentence is the essence of the problem of communications—how to disseminate information of the auxiliary's activities and the many problems that face organized medicine, to our members. This goal, the dissemination of information, can be attained, I believe, by:

1. Stimulating and exciting auxiliary meetings.
2. Active and enthusiastic committee work.
3. Dissemination of information through the president's page in California Medicine, through the *Courier*, by informal memoranda—perhaps only a postcard—to county presidents and committee chairmen.
4. The president's newsletter.
5. Personal visits by your officers to the various county medical auxiliaries. (And may I suggest that the county presidents, or their program chairmen, set up panel discussion meetings at the time of my visit to their county. I shall be pleased and privileged to be one of the panelists and I hope that the county president will serve as moderator at this meeting. An informal question-and-answer program, based on the concept "Information Please," I believe will be worthwhile and stimulating both to the local county auxiliary members and to me.)

I should like at this point to digress for a moment and pay my respects to the hard-working committees of the Woman's Auxiliary to the California Medical Association and at the same time to the local county auxiliary committees. The success and outstanding record of the Woman's Auxiliary to the California Medical Association in the past has been due in a large measure to the outstanding contributions made by these committees. It is only through committee work, hard-working, conscientious and progressive, that the success of any administration can be assured. It is my earnest hope and the hope of your officers that these committees will give of their time and their effort in the future as they have so diligently and conscientiously in the past. For in truth, if my year is a successful one, that success will be largely due to these hard-working committees. I shall not at this time burden you with a review of the functions and activities of all of these committees. Rather, I shall resort to personal communication to the chairmen of these important committees, and outline in detail to them their activities.

It will be of interest to you that this year I have formed two new committees. One of these, a committee to deal with a subject that has gained the spotlight in medical legislative affairs, is the Com-

Inaugural Address by Mrs. Samuel Gendel on Induction to Presidency at the Annual Meeting of the Woman's Auxiliary to the California Medical Association.

mittee on the Problems of the Aging. We have been asked by our parent organization, the California Medical Association, to help in the solution of problems surrounding this issue. I hope that, as in the past when we have been given difficult assignments, we shall rise to the occasion.

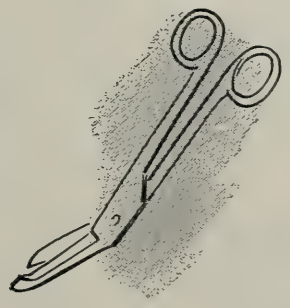
The second new committee that has been formed is the Students American Medical Association Committee. Eligible to belong to this organization are the wives of medical students, interns and residents. To me, this is a most interesting and stimulating project, for what better way is there to interest and educate our prospective Auxiliary members than through the method of early indoctrination? Our attention is particularly drawn to this opportunity owing to our proximity to five outstanding medical schools here in California.

Again, I wish to emphasize that the two new committees—important though they are—should in no way lessen or detract from the importance of our present existing committees. And I mean all of them. May I very briefly mention them to you: *A.M.E.F.*—a project which must always be high on our list; *Legislation*—with its vigilance on legislative matters as they pertain to medicine and public health; *Civil Defense, Safety* and *GEMS*—all of which have been active, enthusiastic and worthwhile projects in the past and I hope will continue to be so in the future; the *Bulletin*—our textbook, and I do hope that its circulation will be increased; *Para-medical Careers* (formerly Nurse Recruitment), an extremely important committee that has broadened its objectives to include recruitment not only of nurses but also of trainees for other fields allied with medicine, such as medical technologists and physical therapists; *Community Services* (formerly Public Relations) is a key committee indeed, and I have always likened it to the hub of the wheel in our Auxiliary, for community service offers a job for every doctor's wife. At the core of any public relations program are the good will and friendly relationships established at the "grass roots" level, and that level begins in the doctor's office and the wife's relationship with her community. As we begin the new year with high aims and hopes, let us make Public Relations a part of our daily life, and let us work together in cooperation and harmony for the best public relations the Auxiliary has ever had. *Physicians' Benevolence* is a committee that should at all times receive our utmost support and assistance; and *Courier*, our "informer" and transmitter of information, news and, frequently, our better pictures.

I should like at this point to emphasize the importance to our organization of the members-at-large. As you so well know, these are our interested but relatively isolated members. I hope we can make them feel more at home and more a part of us. To accomplish this I strongly urge all state chairmen to send copies of Auxiliary material to each of the members-at-large.

I am deeply appreciative of the fine officers whom you have selected to represent you and to work with me. I am grateful to the committee chairmen whom I have selected and who have agreed to assume important responsibilities. Your officers and your committee chairmen, in assuming these positions, have placed service above self. We need and seek your support and cooperation throughout the year.

Finally, may I express my deep sense of appreciation to our immediate past president, Phyllis Poska, under whose excellent tutorship I have gained much in the past year. The Auxiliary owes a deep debt of gratitude to her. With your support, I hope that my year will be as successful as hers has been and that I, too, shall be able a year from now to experience that rewarding sense of accomplishment that Phyllis must now have.



NEWS & NOTES

NATIONAL • STATE • COUNTY

ALAMEDA

The Eighth Annual **Clifford D. Sweet Seminar** of Children's Hospital of the East Bay will be held June 2, 3 and 4, 1960. Further information may be obtained from the hospital, 51st and Grove Streets, Oakland.

LOS ANGELES

Techniques of teaching **diseases of the chest** in undergraduate medical schools is the subject of a one-day symposium to be held April 30, 8:30 a.m. to 5 p.m. in Los Angeles under the sponsorship of the Tuberculosis and Health Association of Los Angeles County. Participants will meet at the Jonathan Club, 545 S. Figueroa Street, according to Oscar J. Balchum, M.D., program committee chairman. Registration details may be obtained at the Tuberculosis Association, 1670 Beverly Boulevard, Los Angeles 26.

* * *

The Metropolitan Dermatological Society of Los Angeles has announced the following officers for 1960: Dr. Max Popper, Beverly Hills, president; Dr. Murray C. Zimmerman, Whittier, vice-president; Dr. Rose B. Saperstein, Los Angeles, secretary-treasurer; Dr. John W. Carney, Los Angeles, program chairman.

SACRAMENTO

Dr. Louis Jones of Roseville, secretary of the California State Board of Medical Examiners, was elected president-elect of the Federation of State Medical Boards of the United States at a recent meeting of the organization in Chicago.

SAN FRANCISCO

The **Second Course in Strabismus** will be presented July 13, 14 and 15 at San Francisco-Stanford Hospital (which is in process of becoming the Presbyterian Hospital and Medical Center of San Francisco). The guest lecturer will be Dr. Harold Brown of New York. The other members of the faculty will be Dr. Arthur Jampolsky and Dr. Edward Tamler of San Francisco. Further information may be obtained from: Secretary, Eye Bank, 2018 Webster Street, San Francisco 15.

SAN MATEO

The Third Annual **Symposium of the Sequoia Hospital Medical Staff** of Redwood City will be held on Saturday, May 14, 1960. The topic will be "Organ Transplantation."

Admission will be free to all physicians but pre-registration will be necessary. The program will begin at 9:00 a.m. and will continue to 5:00 p.m. Lunch will be served in the hospital dining room.

Inquiries may be addressed to Daniel Liebowitz, M.D., Sequoia Hospital Day Chairman, Sequoia Hospital, Redwood City.

GENERAL

A sum of $1,500,000 has been appropriated by the Congress of the United States for fiscal year 1960 to further the widespread application of existing knowledge of **preventing and controlling cancer.** These funds are being administered by the Cancer Control Program, Public Health Service, under the technical guidance of the director of the National Cancer Institute.

Guidelines for the use of this money were developed by the Cancer Control Program's newly formed Advisory Committee under **Dr. David A. Wood,** professor of pathology at the University of California School of Medicine. Two other California physicians are among the 13 who make up the advisory group: **Dr. John W. Cline,** San Francisco, Director, California Division, American Cancer Society, and member of the Cancer Commission of the California Medical Association; and **Dr. Charles E. Smith,** Berkeley, professor of public health and dean of the Department of Public Health, University of California, and president of the California State Board of Health.

* * *

The **California Medical Assistant's Association** will hold its annual convention at the Claremont Hotel, Berkeley, April 23 and 24.

Dr. William Maxwell Thebaut of Oakland will speak on "The Middle Years" at a luncheon Saturday, April 23.

For those who are not required to attend the delegates' business session, a workshop has been planned for Saturday afternoon. Robert S. King, of the California Farm Bureau Federation, whose subject will be "Organization"; William K. Scheuber, executive secretary of the Alameda-Contra Costa Medical Association, will show a film and speak on "Quackery"; and Walter Thompson of the Bureau of Medical Economics will speak on "Collections."

Mrs. Lauretta Cole of Santa Barbara will be installed as president at a Saturday night banquet. Following the installation a film concerned with the role of the medical assistant in the doctor's office, will be shown.

Information on registration and fees may be obtained from Mrs. Mary McPartland, C.M.A.A. registration chairman, 298 Grand Avenue, Oakland.

* * *

Two faculty members in California medical schools have been appointed **Markle Scholars in Medical Science** by the John and Mary R. Markle Foundation of New York. Each appointment carries with it a $30,000 grant, to be paid over a five-year period, 1960-65, to the medical school where the scholar will teach and do research. The awards in California were:

Stanford University School of Medicine, Palo Alto, for J. Thomas August, M.D., assistant professor, internal medicine, effective September 1960.

University of California at Los Angeles School of Medicine for David S. Maxwell, Ph.D., assistant professor of anatomy, effective July 1.

10TH ANNIVERSARY

REGIONAL POSTGRADUATE INSTITUTE

SAN JOAQUIN VALLEY COUNTIES

April 28 and 29

(See page 298)

POSTGRADUATE EDUCATION NOTICES

THIS BULLETIN of the dates of postgraduate education programs and the meetings of various medical organizations in California is supplied by the Committee on Postgraduate Activities of the California Medical Association. In order that they may be listed here, please send communications relating to your future medical or surgical programs to: Mrs. Margaret H. Griffith, Director, Postgraduate Activities, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5.

UNIVERSITY OF CALIFORNIA AT LOS ANGELES

Clinical Traineeships — Anesthesia, Dermatology and Pediatric Cardiology. Dates by arrangement. Minimum period—two weeks. Fee: Two weeks, $150.00; four weeks, $250.00.

Postgraduate Medical Symposium. Grossmount Hospital, La Mesa. Saturday and Sunday, April 30 and May 1. Twelve hours. Fee: $25.00 (includes two luncheons).

Management of Medical Emergencies. Friday and Saturday, May 6 and 7. Twelve hours. Fee: $40.00 (includes one luncheon).

SURGICAL ANATOMY. Friday through Monday, June 24 through 27.

Head and Neck. Friday, June 24. Fee: $40.00.†

Thorax, Abdomen and Pelvis. Saturday and Sunday, June 25 and 26. Fee: $80.00.†

Extremities. Monday, June 27. Fee: $40.00.†

General Pediatrics. Sunday through Wednesday, July 17 through 20. Lake Arrowhead, University of California Residential Conference Center. Sixteen hours. Fee: $137.50 (including room and meals).

Advance Seminar in Internal Medicine. Wednesday through Sunday, July 20 through 24. University of California Residential Conference Center, Lake Arrowhead. Eighteen hours. Fee: $150.00 (including room and meals).

Dermatology in Office Practice. Monday and Tuesday, July 25 and 26. Twelve hours. Fee: $40.00.

Advanced Seminars in Dermatology (for Dermatologists). Wednesday through Saturday, July 27 through 31. University of California Residential Conference Center, Lake Arrowhead. Fourteen and one-half hours. Fee: $150.00 (including room and meals).

Anesthesia for Special Procedures. Wednesday, Thursday and Friday, August 3, 4 and 5. Eighteen hours. Fee: $60.00.

Arthritis and Rheumatism. Friday and Saturday, August 19 and 20. Twelve hours.*

Obstetrical Procedures and Complications. Thursday and Friday, August 26 and 27. Twelve hours. Fee: $50.00 (includes two luncheons).

*Fees to be announced.
†Hours to be announced.

For Ancillary Personnel

Fifth Regional Conference for Nurses. Sunday through Wednesday, June 12 through 15. Thirty-two hours. Fee: $80.00.

The College Nurse: New Concepts in Her Profession. Friday and Saturday, June 17 and 18. Twelve hours. Fee: $20.00.

9th Annual Symposium in Clinical Laboratory Technology. Saturday and Sunday, June 18 and 19. Sixteen hours. Fee: $20.00.

Workshops for School Nurses:

Riverside, Tuesday through Saturday, June 21 through 25. Forty-five hours. Fee: $40.00.

Los Angeles, Tuesday through Saturday, July 5 through 9. Forty-five hours. Fee: $40.00.

San Diego, Wednesday through Sunday, July 13 through 17. Forty-five hours. Fee: $40.00.

Contact: Thomas H. Sternberg, M.D., assistant dean for Continuing Medical Education, U.C.L.A. Medical Center, Los Angeles 24. BRadshaw 2-8911, Ext. 7114.

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Neuropsychiatry in General Practice (Napa State Hospital). Thursday evenings, April 21 through May 26. Twelve hours. Fee: $5.00.

Symposium on Pediatric Surgery (Children's Hospital). Saturday, April 23. Seven hours. Fee: $12.50.

General Surgery. Monday to Friday, April 25 to 29. Thirty-five hours. Fee: $100.00.

Evening Lectures in Medicine. Wednesdays, April 27 through June 1. Twelve hours. Fee: $25.00.

Symposium on Cardiovascular Disease (Santa Rosa). Wednesday, May 4. Seven hours. Fee: $15.00.

A Course on Urology. Thursday and Friday, May 5 and 6. Fourteen hours.*

Ear, Nose, Throat. Thursday to Saturday, May 12 to 14. Twenty-one hours.*

Proctology. Thursday and Friday, May 19 and 20. Fourteen hours. Fee: $40.00.

Advances in Surgical Anatomy, Normal Anatomy and Histology of the Eye. Thursday to Saturday, June 2 to 4. Twenty-one hours.*

A Course on the Foot. Thursday to Saturday, June 9 to 11. Twenty-one hours.*

A Course in Industrial Medicine. Wednesday to Friday, June 22 to 24. Twenty-one hours.*

A Course on New Drugs. Thursday to Saturday, July 14 to 16. Twenty-one hours.*

Obstetrics and Gynecology. Thursday to Saturday, September 15 to 17. Twenty-one hours.*

Fundamental Practices of Radioactivity and the Diagnostic and Therapeutic Uses of Radioisotopes. Two or three month course limited to one enrollee per month. Fee: $350.00.

For Ancillary Personnel

Evening Lectures on Pharmacy. Mondays, April 18 to May 23. Twelve hours. Fee: $15.00.

Nursing Care of Mothers and Children. Tuesdays, April 19 through June 7, Highland Hospital, Oakland. Sixteen hours. Fee: $25.00.

Nursing Care of Medical-Surgical Patients. Thursdays, April 21 through June 9. Highland Hospital, Oakland. Sixteen hours. Fee: $25.00.

Course for Laboratory Technologists. Saturday and Sunday, April 30 and May 1. Fourteen hours. Fee: $15.00.

Nursing and People. Monday to Friday, May 2 to 13. Fee: $30.00.

Understanding the Adolescent for Nursing Care. Saturday and Sunday, May 14 and 15. Fee: $15.00.

Human Relations in the Modern Hospital. Monday through Friday, June 13 through 17. Fee: $50.00.

Integration of Psychiatric Principles in the Total Curriculum. Tuesday to Friday, July 5 to August 12. Fee: $100.00.

Cancer Nursing. Wednesday through Friday, August 10 through 12.*

Continuing Education Conference Series. Tuesday through Friday, September 6 through 16.*

Administration of Nursing Care. Tuesdays, September 13 through December 13. Fee: $45.00.

Contact: Seymour M. Farber, M.D., assistant dean, Department of Continuing Medical Education, University of California Medical Center, San Francisco 22. MOntrose 4-3600, Ext. 665.

STANFORD UNIVERSITY SCHOOL OF MEDICINE, PALO ALTO

Emotional and Social Aspects of Child Health in Pediatric Practice. June 13 through 24. *Contact:* Hale F. Shirley, M.D., Professor of Pediatrics and Psychiatry, Stanford Medical Center, 300 Pasteur Drive, Palo Alto, Calif.

STANFORD HOSPITAL, SAN FRANCISCO (Lane Presbyterian Medical Center)

Eye Conference. Each Monday morning.

Didactic Course in Ophthalmology. Monday and Wednesday, 7 to 8:30 p.m.

Course on Keratoplasty for Specialists in Ophthalmology. Wednesday through Friday, May 18 through 20.

Postgraduate Conference in Strabismus. Wednesday through Friday, July 13 through 15.

Contact: Arthur Selzer, M.D., program committee chairman, San Francisco-Stanford Hospital, Clay and Webster Sts., San Francisco 15.

UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES

Cardiac Resuscitation. Sponsored by the Los Angeles County Heart Association each Wednesday throughout the year, 4 to 6 p.m. USC Medical Research Building, Room 211, 2025 Zonal Avenue. Residents and interns of Los Angeles County, and all armed forces medical personnel admitted without fee. Tuition for all other physicians: $30.00. (Each session all-inclusive.)

Basic Home Course in Electrocardiography. One year postgraduate series, electrocardiogram interpretation by mail. Physicians may register at any time and receive all 52 issues. Fifty-two weeks. Fee: $100.00.

Advance Home Course in Electrocardiography. One year postgraduate series, electrocardiogram interpretation by mail. Fifty-two issues: $85.00. Physicians may register at any time.

Hawaii Course: The USC School of Medicine will offer the Third Postgraduate Refresher Course to be held in Honolulu and on board the S.S. *Lurline* from August 4 to August 20, 1960. (As a time and money saver, round trip air travel is also possible August 4 to August 14.)

Contact: Phil R. Manning, M.D., associate dean and director, Postgraduate Division, University of Southern California School of Medicine, 2025 Zonal Avenue, Los Angeles 33. CApital 5-1511.

COLLEGE OF MEDICAL EVANGELISTS

CLINICAL TRAINEESHIPS available in all clinical departments by arrangement with the Postgraduate Division and the chairman of the department or departments involved. Eighty hours minimum. Fee: As arranged.

Diseases of the Chest: Two and four-week Traineeships in cooperation with the Los Angeles County Hospital. Dates as arranged.

Anesthesia. Monday through Friday. Dates as arranged. Six months. Fee: $350.

SPECIAL SKILLS available in the clinical departments, usually with a maximum of two or three students.

Surgical Anatomy: Head and Neck, April 20 through June 1, 63 hours. Fee: $75.00.

Surgical Anatomy: Head and Neck, April 20 through June 1. Twenty-four hours. Fee: $35.00.

JOINT MANIPULATION. Monday through Friday, 8:00 to 12:00, dates to be arranged. Twenty hours. Fee: $75.00.

For information contact: G. E. Norwood, M.D., assistant dean and chairman, Division of Postgraduate Medicine, College of Medical Evangelists, 1720 Brooklyn Ave., Los Angeles 33. ANgelus 9-7241, Ext. 214.

CALIFORNIA MEDICAL ASSOCIATION

POSTGRADUATE INSTITUTES—1960 *(Tenth Anniversary Year)*

Southern Counties in cooperation with Stanford University School of Medicine, April 21 and 22. Palm Springs Riviera Hotel. *Chairman:* Robert M. Zweig, M.D., 7004 Magnolia, Riverside.

San Joaquin Valley Counties in cooperation with University of Southern California School of Medicine, April 28 and 29. Ahwahnee Hotel, Yosemite. *Chairman:* Campbell H. Covington, M.D., 2057 High Street, Selma.

*Fees to be announced.

Sacramento Valley Counties in cooperation with UCLA School of Medicine, July 1 and 2. Tahoe Tavern, Lake Tahoe. *Chairman:* Herbert W. Korngold, M.D., 1217 30th Street, Sacramento.

Contact: One of the chairmen listed above, or Postgraduate Activities Office, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5.

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Audio-Digest Foundation, a nonprofit subsidiary of the C.M.A., offers (on a subscription basis) a series of six different hour-long tape recordings covering general practice, surgery, internal medicine, obstetrics and gynecology, pediatrics and anesthesiology. Designed to keep physicians posted on what is new and important in their respective fields, these programs survey current national and international literature of interest and contain selected highlights of on-the-spot recordings of national scientific meetings, panel discussions, symposia, and individual lectures. For information contact Mr. Claron L. Oakley, Editor, 1919 Wilshire Blvd., Los Angeles 57, HUbbard 3-3451.

Medical Dates Bulletin

APRIL MEETINGS

Palo Alto Clinic Third Annual Symposia. Sponsored by the Clinic and Palo Alto Medical Research Foundation. Saturday, April 23. Clinic Auditorium. *Contact:* John F. Weigen, M.D., program chairman, Palo Alto Clinic, Palo Alto.

California Medical Assistants Association Annual Convention. April 23 and 24. Claremont Hotel, Berkeley. *Contact:* Mrs. Anne Reece, president CMAA, 1837 So. Indiana St., Porterville, California.

Association of School Physicians and Dentists of Los Angeles Board of Education. Dinner meeting honoring Dr. Morley Sellery who is retiring. April 27. 7:00 p.m. Los Angeles County Medical Association Building. *Contact:* Lillian Shutter, M.D., chairman, 4036 Wilshire Boulevard, Los Angeles.

West Contra Costa Branch of California Academy of General Practice Postgraduate Course. Wednesdays, April 27 through June 1, 8 p.m. to 10 p.m., Brookside Hospital, San Pablo. *Contact:* D. D. Vollan, M.D., chairman, Education Committee, Brookside Hospital, San Pablo.

Valley Children's Hospital Spring Clinics. April 28 to 30. Roosevelt High School Auditorium, Fresno. *Contact:* Valley Children's Hospital, Shields and Millbrook Avenues, Fresno.

TB and Health Association, Los Angeles County Workshop on Techniques of Teaching Chest Disease. Jonathan Club, Los Angeles. April 30, 8:30 a.m. to 5 p.m. *Contact:* Mr. Richard Gaines, staff coordinator, 1670 Beverly Blvd., Los Angeles 26.

MAY MEETINGS

Pan American Medical Association Congress. May 2 to 11. Mexico City. *Contact:* Joseph J. Eller, M.D., director general, 745 Fifth Avenue, New York, N. Y.

Los Angeles County Heart Association Annual Meeting. Biltmore Bowl, Los Angeles—Luncheon, 12:00 noon. Wednesday, May 4. *Contact:* Chauncey A. Alexander, executive director, 2405 West 8th St., Los Angeles 57.

Memorial Hospital of Long Beach Medical Staff 2nd Annual Scientific Symposium "New Horizons in Medicine," to be held in conjunction with the formal opening of the new 400-bed Memorial Hospital of Long Beach. May 4. *Contact:* George X. Trimble, M.D., director of medical education, Seaside Memorial Hospital, 1401 Chestnut Avenue, Long Beach 13.

Student American Medical Association, Statler-Hilton Hotel, Los Angeles, May 5 through 8. *Contact:* Mr. R. F. Staudacher, executive director, 430 N. Michigan, Chicago 11.

Nevada Academy of General Practice 1960 Annual Assembly. May 12 through 14. Riverside Hotel, Reno, Nevada. Scientific program by University of California School of Medicine. *Contact:* Roy M. Peters, M.D., general chairman, 475 So. Arlington, Reno, Nevada.

Hawaii Medical Association Annual Meeting. May 12 through 15. *Contact:* Miss Lee McCaslin, executive secretary, 510 S. Beretania, Honolulu 13.

National Tuberculosis Association—American Trudeau Society Annual Meeting. May 16 through 19. Statler Hilton and Biltmore Hotels, Los Angeles. *Contact:* Mr. Sherman Asche, general chairman, Annual Meeting Committee, P. O. Box 4037, Santa Barbara.

American College of Nutrition 1960 Annual Convention. May 20 through 22. Huntington Sheraton Hotel, Pasadena. *Contact:* Donald B. Haynie, executive secretary, 10651 West Pico Blvd., Los Angeles 64.

California Heart Association Annual Meeting and Scientific Session. May 20 through 22. Claremont Hotel, Berkeley. *Contact:* J. Keith Thwaites, executive director, 1428 Bush Street, San Francisco 9.

Long Beach Surgical Society Annual "Clinic Day." May 21. Lafayette Hotel, Long Beach. 2 p.m. to 9 p.m. *Contact:* Harriman Jones, M.D., secretary-treasurer, 211 Cherry Ave., Long Beach 2.

SUMMER AND FALL MEETINGS

San Diego County Medical Society and the Medical Department, 11th Naval District. Symposium on Clinical Medicine and Surgery. Sunday, June 5, 8:30 a.m. to 5:00 p.m. El Cortez Hotel, San Diego. *Contact:* Michael J. Feeney, M.D., program chairman, 3427 Fourth Ave., San Diego 3.

Gerontological Society, Inc., Mark Hopkins Hotel, San Francisco. August 7 through 12. *Contact:* Mrs. Marjorie Adler, administrative secretary, 660 S. Kingshighway Blvd., St. Louis 10.

Reno Surgical Society 10th Annual Conference. August 18, 19 and 20. The Mapes Hotel, Reno. *Contact:* Harry B. Gilbert, M.D., 275 Hill Street, Reno, Nevada.

American Association of Blood Banks, Jack Tar Hotel, San Francisco. August 21 through 26. *Contact:* John B. Alsever, M.D., secretary, 1211 W. Washington St., Phoenix, Arizona.

American Hospital Association, Civic Auditorium, San Francisco. August 27 through September 1. *Contact:* Mr. Maurice J. Norby, assistant director, 18 E. Division St., Chicago.

Pacific Dermatologic Association Inc. 12th Annual Meeting. Empress Hotel, Victoria, British Columbia. September 2 through 4. *Contact:* Edward Ringrose, M.D., secretary, 2636 Telegraph Ave., Berkeley.

Oregon State Medical Society, Portland. September 7 through 9. *Contact:* Mr. Roscoe K. Miller, executive secretary, 1115 S. W. Taylor St., Portland 5, Oregon.

Nevada State Medical Association Annual Meeting. September 7 through 10. Stardust Hotel, Las Vegas. *Contact:* Nelson B. Neff, executive secretary, P. O. Box 2790, Reno, Nevada.

Postgraduate Assembly of Saint John's Hospital. September 8 through 10. 9 a.m. to 4 p.m., St. John's Hospital, Santa Monica. *Contact:* John C. Eagan, M.D., director, 1328 22nd St., Santa Monica.

Santa Barbara County Heart Association Physicians Symposium. September 17, 9:00 a.m. to 5:00 p.m., Biltmore Hotel, Santa Barbara. *Contact:* E. J. Hannon, executive director, 18 La Arcada Court, Santa Barbara.

California Society of Internal Medicine Annual Meeting, Yosemite. September 23, 24 and 25. *Contact:* Barbara E. Oulton, executive secretary, 350 Post St., San Francisco 8.

Washington State Medical Association Annual Convention. September 25 through 28. Olympic Hotel, Seattle, Washington. *Contact:* R. W. Neill, executive secretary, 1309 7th Avenue, Seattle, Washington.

Pan-Pacific Surgical Association 8th Intensive Surgical Congress, embracing all Surgical Specialties. September 28 through October 5. Honolulu, Hawaii. *Contact:* F. J. Pinkerton, M.D., director general, Suite 230, Alexander Young Building, Honolulu 13.

American Association for the Surgery of Trauma. Coronado Hotel, San Diego. October 5 through 7. *Contact:* William T. Fitts, Jr., M.D., secretary, 3400 Spruce St., Philadelphia 4.

Los Angeles County Heart Association 30th Annual Professional Symposium on Cardiovascular Diseases. October 5 and 6. Beverly Hilton Hotel, Beverly Hills. *Contact:* Los Angeles County Heart Association, 2405 W. 8th St., Los Angeles 57.

San Francisco Heart Association 30th Annual Postgraduate Symposium on Heart Disease. October 5 through 7. St. Francis Hotel, San Francisco. *Contact:* Mr. Lawrence I. Kramer, Jr., executive director, 259 Geary St., San Francisco 2.

Western Industrial Medical Association combined Meeting with 4th Western Industrial Health Conference. October 7 through 9. Jack Tar Hotel, San Francisco. *Contact:* Verne G. Ghormley, M.D., president, 3032 Tulare Street, Fresno 21.

American College of Surgeons, 46th Annual Clinical Congress, San Francisco. October 10 to 14. *Contact:* William E. Adams, M.D., secretary, 40 E. Erie St., Chicago 11.

Kaiser Foundation Hospitals in Northern California Fourth Annual Symposium on Human Genetics. October 14 and 15. Fairmont Hotel, San Francisco. *Contact:* Martin A. Shearn, M.D., Director of Medical Education, 280 West MacArthur Blvd., Oakland.

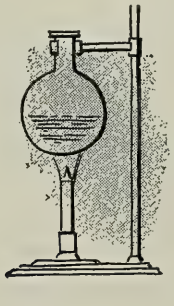
California Academy of General Practice 11th Annual Scientific Assembly. October 16 through 19. Masonic Memorial Temple, San Francisco. *Contact:* William W. Rogers, executive secretary, 461 Market St., San Francisco 5.

Western Orthopedic Association Annual Convention. October 22 through 27. Hotel Del Coronado, Coronado. *Contact:* Mrs. Vi Mathieson, executive secretary, 354 21st St., Oakland 12.

St. Jude Hospital—Fullerton 2nd Annual Postgraduate Assembly. October 27 and 28. St. Jude Hospital. *Contact:* B. L. Tesman, M.D., chairman, St. Jude Hospital, Fullerton.

American School Health Association, San Francisco. October 30 through November 4. *Contact:* A. O. DeWeese, M.D., executive secretary, 515 E. Main St., Kent, Ohio.

American Public Health Association, San Francisco. October 31 through November 4. *Contact:* Berwyn F. Mattison, M.D., executive director, 1790 Broadway, New York 19.





THE PHYSICIAN'S *Bookshelf*

SMOKING AND HEALTH—Alton Ochsner, M.D. Julian Messner, Inc., 8 West 40th Street, New York 18, New York, 1959. 108 pages, $3.00.

The 1954 booklet on "Smoking and Cancer" now reappears as "Smoking and Health." The dust jacket tells us that "Here are the facts . . . proof that smoking not only causes lung cancer, but is contributory to other types of cancer, to heart disease, miscarriage, menstrual disturbances, Buerger's disease and stomach ulcers. Furthermore, it is a factor in impotence in men and sterility in women." The book is now divided into six sections, instead of the former sixteen, has some new charts but no new scientific information to substantiate many of the bold pronunciamentos liberally interlarded. For example, after quoting President Truman—"Columbus brought syphilis to the Indians and they gave him tobacco. It is doubtful which is worse," Dr. Ochsner goes on to say, "Syphilis can be cured quickly with antibiotic treatment; science is still looking for some way to cure advanced cancers and heart disease," the implication being that smoking is as certainly linked to these disorders as syphilis is to the treponema.

The author fails to record the following facts:

1. No case of lung cancer has been produced in man or comparable animal by prolonged application of cigarette smoke.

2. No proof has been established that the samples of cigarette smokers studied in the United States and Great Britain are biologically identical with the samples of non-smokers. Many biostatisticians question the true comparability of the two population groups. The final report of the famous American study emphasizes that "The most important finding of this study was the high degree of association between cigarette smoking and *total death rate*." In other words, it would appear that heavy cigarette smokers are "a different breed of cats" constitutionally and in general mode of life.

3. No answer is available to the curious paradox that the "precancerous changes" of Auerbach are predominant in the trachea and main bronchi, which are precisely the places where primary lung cancer is relatively uncommon.

4. No explanation is agreed on for the fact that in England the death rate from lung cancer is approximately twice that in the United States, but the reported cigarette consumption is only about one-half.

5. No valid explanation exists for the curious absence of any significant increase in the prevalence of laryngeal cancer in the United States in the last 35 years.

On page 97, in a paragraph dealing with the legal responsibility of the tobacco companies, the author reproduces the sentence, "For if it is an offense to produce foods which are harmful to the health of customers it is an offense to produce smoking products which are too often deadly to those who use them." Are then the milk companies to be sued for producing high-fat foods, the chicken farmers for cholesterol-laden eggs, and the wine growers for cirrhosis-inducing beverages. Like nicotine, all these substances are advertised and in a free country may alas be taken in amounts potentially "deadly to those who use them." Are the sugar refiners, soft drink merchants and candy manufacturers to be sued for dental caries and its train of ills. Perhaps they should be, but is this for a crusading surgeon to decide? Taken in moderation, these foods and other substances come pretty close to being the staff of modern life.

The polemics in this booklet, like tobacco, should be taken in moderation.

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TEXTBOOK OF MEDICINE, A—Tenth Edition—Edited by Russell L. Cecil, M.D., Sc.D., Professor of Clinical Medicine Emeritus, Cornell University, and Robert F. Loeb, M.D., Sc.D., D. Hon. Causa, LL.D., Bard Professor of Medicine, Columbia University. W. B. Saunders Company, Philadelphia, 1959. 1665 pages, 182 figures—in one volume, $16.50, or in two volumes, $20.50.

Many texts on medicine are published. Comparatively few survive more than one or two editions. This, the tenth edition of Cecil and Loeb marks it as one of the hardier perennials of medicine, with ten editions in 32 years.

This edition, incorporating more complete changes than any previous one, rates—along with Harrison's Principles of Internal Medicine—as one of the two leading text books on general medicine available. Quite a few subjects not previously covered are now included. Despite the added material there is no increase in number of pages, because of a new and clearer type.

As the years have passed and clinical medicine has included more basic science, so has the Cecil-Loeb tended to include more between its covers. In this edition, each section has an introduction which deals with the basic science relationships of the organ system or the disease condition which comprises the main topic. Furthermore, discussions of physiology, pathology and pathogenesis have been incorporated as far as possible into the body of the clinical discussion. For example, in the section on Diseases of the Pituitary Gland, there is first given a clear and fairly detailed discussion of the hormones of the anterior lobe; farther on are separate discussions of the individual diseases.

The index is generally complete. A few flaws are found. For example; there is no cross reference listed under *atrial, auricular, arrhythmia* or *fibrillation*, despite the fact that the cardiac arrhythmias are well covered in the text.

It is inevitable that there is a certain amount of differing emphasis on various subjects. On the one hand, one finds the outstanding 22 page monograph on diabetes; on the other, there is no mention of estrogen therapy for osteitis deformans.

To summarize, this is a distinguished text book on medicine, packed full of information which is given logically and as simply as possible. It is also, as it has always been, a first class clinical book. It is highly recommended to all practitioners as well as to the medical students for whom it is primarily written.

EDGAR WAYBURN, M.D.

THE MODERN FAMILY HEALTH GUIDE—Edited by Morris Fishbein, formerly Editor, Journal of the American Medical Asociation; Editor, Excerpta Medica; Medical Editor, Britannica Book of the Year. Doubleday & Company, Inc., Garden City, New York, 1959. 1001 pages, $7.50.

The book is composed of two sections approximately equal in bulk. The first is a collection of essays on topics such as The Meaning of Health, Diet, Child Care, and various organ systems and specific diseases. The second is an alphabetical compendium of descriptions and brief discussions of parts of the body, symptoms, diseases, drugs, and so forth.

Dr. Fishbein shows ambivalence in his introduction: "a little of the right kind of knowledge would surely relieve and prevent many of the common ills. Such knowledge is what this book is intended to provide. Even though it is a big book, I emphasize a *little* knowledge. . . ." Surely, here is the situation for a broadly competent author, who has thought about the needs of the public for medical information, and the techniques of displaying it, to present an integrated survey. However, "The comprehensive articles . . . were written by 27 competent authorities . . . (providing) advice and guidance . . . that would be almost unpurchasable by the average patient," with the predictable consequences of gaps in coverage, overemphasis on special interests of the writers, and variation in the intellectual and educational demands upon the reader. Some of the experts are so careful to avoid the uncertainties and reservations in their fields that they end up saying very little. Several of the chapters are very good.

A number of careless errors of writing have survived the editor. Diagrams are sparse and the choice of subjects for illustration is bizarre.

There is much in this book that is good, but few physicians will want to recommend it to the patient who seeks a source of information about health and disease because it raises as many questions as it answers.

RODNEY R. BEARD, M.D.

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OBSERVATIONS ON DIRECT ANALYSIS—The Therapeutic Technique of Dr. John N. Rosen—Morris W. Brody, M.D.; with forewords by John N. Rosen, M.D., and O. Spurgeon English, M.D. Vantage Press, Inc., 120 W. 31st Street, New York 1, New York, 1959. 104 pages, $2.95.

This book represents the first attempt to describe what occurs in Dr. John Rosen's technique of "Direct Analysis" of psychiatric patients. It is not concerned with the evaluation of its therapeutic effectiveness. Brody, the author, was the leader of a group that observed and analyzed the Rosen method of treatment. Rosen apparently justifies his considering direct analysis to be an extension of Freudian psychoanalysis, because he was unable to achieve good results with psychotic patients prior to his own personal analysis. He compares a psychosis to a dream or to an interminable nightmare and justifies the violence of his technique as a necessity to awaken the patient from his nightmare.

It appeared to the observers that Rosen's crude and forceful remarks to the patients were primarily aimed at evoking guilt and not at giving insight. Rosen drums interpretations into the patients' heads, he accuses them of being insane, forces them to admit incestuous wishes, charges them with being stupid when they don't accept his ideas, threatens them and uses a team of assistants to maintain a God-like omnipotent position. On the other hand he rewards them with praise and other things when they go along with him.

Once the patient loses his psychotic symptoms, Rosen does everything possible to make the patient reenact the psychosis. "If the patient in his psychosis spoke to imaginary voices, Rosen will insist that he again speak to these voices." He tries to give the patient an opportunity to see himself as he was when psychotic. He will ask the patient to be insane for half an hour and does not give the patient an opportunity to deny that he has been psychotic. He also maintains an attitude with the patient that no greater opportunity can be afforded a person than to have the good fortune to experience insanity for a period of time. He seems to be saying, "Although it is not acceptable to be insane, it is a distinction to have been insane."

Brody states, "To watch the group (of assistants) while Dr. Rosen is treating a patient is a startling experience. The group members sit in absolute silence. All eyes are riveted on Rosen and attention is rarely detracted for a moment. The atmosphere is one of awe, and one obtains the impression that not only is the patient being treated but all members of the group are participating. We have observed this type of group reaction when an audience watches a hypnotist at work . . . it is as if the group waited and watched for a miracle to be performed, . . . while influencing the patient to surrender his individual rights to the will of the leader.

The observers were impressed with Rosen's attempt to evoke feelings of guilt in the psychotic patient by repeatedly telling him, "You are crazy; this is shameful behavior; stop acting in this shameful, crazy way."

Rosen's "Direct Analysis" has created a great deal of interest in psychiatric circles and the detailed descriptions of his remarks and patient responses gives the reader a much better idea of the technique than was previously possible except by direct observation. The book is well written and highly recommended to psychiatrists who are interested in the psychotherapy of psychoses. Additional reports dealing with the effectiveness of Rosen's method which are to be published will be welcome indeed.

NORMAN Q. BRILL, M.D.

* * *

PYELONEPHRITIS—Fletcher H. Colby, M.D., Consultant, Massachusetts General Hospital; former Chief of the Urological Service and Associate Clinical Professor, Harvard Medical School. The Williams & Wilkins Company, Baltimore 2, Maryland, 1959. 214 pages, $7.50.

"Pyelonephritis" represents a broad but rather superficial survey of the important medical problem of infection of the upper urinary tract. It is obviously intended for the medical student or clinician who desires a practical nodding acquaintance with kidney infection rather than a physician who is deeply interested in this field.

While there are few serious omissions in the book, it suffers somewhat from a lack of emphasis on important points in the management of pyelonephritis. While cultures of the urine, both for diagnosis and followup are discussed, their role as the most important single factor in the diagnosis of urinary tract infection is not made entirely clear. The duration of treatment in acute pyelonephritis is stated only as "until repeated urine cultures are bacteria free." More specific recommendations as to length of treatment and timing of follow-up culture would be helpful.

Doctor Colby, as a urologist, defends the position that catheterization is advantageous in collecting a urine for culture in the female. While catheterization of the female may offer valuable information, it is not necessary in culturing the urine provided "clean" technique is used and quantitative cultures are promptly made.

I believe this book is well worth reading but falls short of being a reference work on this important subject although no intention of the latter aim is stated.

CURRENT MEDICAL REFERENCES—Edited by Paul J. Sanazaro, M.D., Associate Professor of Medicine, University of California School of Medicine, San Francisco. Lange Medical Publications, Los Altos, 1959. 535 pages, $3.50.

The mass of medical literature is now so great and the mazes are so complex that we have presented to us an entire book of some 535 pages which is in toto a bibliography of medical references—along with a succinct description or evaluation of each reference.

This book is the latest of the concise, complete, inexpensive paperbacks published during the past few years and kept current by Lange Medical Publications. Like the previous volumes this reviewer has seen, this book will be of greatest value to residents, interns and students. However, the practitioner can also find it useful for his medical bag or handy book shelf. The editors and contributors are chiefly from the University of California Medical School and are to be commended on the excellence of their selections.

EDGAR WAYBURN, M.D.

* * *

MOLECULES AND MENTAL HEALTH—Edited by Frederic A. Gibbs, M.D., Professor of Neurology, University of Illinois College of Medicine, Chicago. Published for the Brain Research Foundation by J. B. Lippincott Company, East Washington Square, Philadelphia 5, Pennsylvania, 1959. 189 pages, $4.75.

This potent little book contains the papers and following discussions which were presented at the Brain Research Foundation on two separate one-day conferences. The first part of the book deals with "Amines in Relation to Brain Function and Behavior." Dr. L. G. Abood presents in the first chapter some current work on ceruloplasmin and gives information about factors influencing the levels in humans. Dr. Robert G. Heath also describes data on ceruloplasmin concerning its effect in schizophrenic patients; he gives further information on Taraxein, but this substance continues to be very elusive, both as to its physiological effects and its chemical composition. These manuscripts are presented in an attempt to bring a little more light into the area of physiologically active blood proteins and point out the difficulties of studies with these substances.

Dr. A. Hoffer has a chapter on the "Mode of Action of Ergot Hallucinogens" and bases his interpretations on plasma adrenochrome levels. However, Dr. Fred Elmadjian discusses "Excretion and Metabolism of Epinephrine and Norepinephrine in Man" and points out that his studies do not show adrenochrome to be a normal metabolite of epinephrine. Thus, the great value of this conference is shown in that men with opposing views have been brought together for discussion.

"Tryptophane Metabolism in Schizophrenics and in Controls" is described by Dr. E. A. Zeller. In the discussion to this paper, Dr. S. S. Kety reports opposing results for the excretion of 5-hydroxyindoacetic acid in schizophrenics after tryptophane feeding, and explains the difference on urine volume and vitamin deficiency.

Dr. Carl C. Pfeiffer presents a paper on "Acetylocholine and Behavior" which contains some interesting studies on the stimulating effects of dimethylaminoethanol in normal and schizophrenic men.

The second conference on the "ACTH Treatment of Hypsarhythmia" was formulated because of the report of one man, Dr. Lucien Sorel of Belgium. Dr. Sorel presents the first paper, a study of 25 children, in which 11 children were treated with ACTH. He states, "all except two showed improvement, some remarkably." Dr. Frederick Stamps in another chapter reports on a group of children treated in this country with ACTH, using the Sorel method, and 20 of 29 patients showed marked improvement. As an outcome of the first ACTH report, Dr. Niels Low reports a further chapter on studies using cortisone and ACTH for the treatment of hypsarhythmia.

The "Neurological Status of Patients with Hypsarhythmia" is examined by Dr. Peter Kellaway with a view to showing the origin of the seizure discharge. Also, "Neuropathologic Findings in Three Cases of Infantile Spasms" is given by Dr. Charles M. Poser. Three additional chapters are devoted to a discussion of ACTH and hypsarhythmia in relation to other brain disorders. These clinical reports on the use of ACTH are so dramatic that anyone who treats children will be interested in reading these preliminary studies.

This is a desirable book for the research scientist; in addition, it has particular value for those who wish to be at the frontier of our knowledge on brain function. The comments are perhaps the most pertinent feature of this book since they help to evaluate and elucidate the information presented.

GRANT SLATER, Ph.D.

* * *

PEDIATRIC PATHOLOGY—Daniel Stowens, M.D., Pathologist, Children's Hospital Society of Los Angeles; Associate Professor of Pathology, University of Southern California; Diplomate, American Boards of Pediatrics and Pathology. The Williams & Wilkins Company, Baltimore, 1959. 676 pages, $20.00.

Pediatric Pathology is important not only because of its concern with the many lesions that are peculiar to children, but also because it provides an opportunity to observe the beginnings or modified versions of many diseases that affect adults. It is remarkable that so few books deal with tissue structure related to disease in the extremely important period of rapid development represented by childhood.

Dr. Daniel Stowens has had a unique opportunity through his past relationship with the Armed Forces Institute of Pathology, as Registrar of the American Registry of Pediatric Pathology, to collect material for this book and to make use of the photographic facilities of the Institute. The result has been a beautifully illustrated compendium of information centering around gross and microscopical tissue changes in childhood disease.

In general this survey is comprehensive. It includes a good discussion of conditions peculiar to the newborn. There are statistics relating to growth and development, with a good discussion of the significance of the size of the body and its organs. There are numerous references, classified as to general subject, but titles are not provided and these contributions are not specifically identified in the text. An appendix presents an analysis of 10,000 cases from the files of the American Registry of Pediatric Pathology, showing the scope and relative incidence of diseases that affect children and are recognized by pathologists.

Sections that serve particularly well to supplement other works on pathologic anatomy are those on developmental disturbances, infectious disease, central nervous system lesions, bone and skin pathology. One may be disappointed at times that presentations, such as that of glomerulonephritis, are principally descriptions of lesions, without much discussion of what the observations in children may mean with respect to our understanding of other manifestations of the same or similar diseases. The author, however, has written speculative sections upon such subjects as sudden unexpected death, hyaline membrane disease, and the nature of tumors.

This is an important book, and will be a valuable reference work for pediatricians, pathologists and others concerned with anatomic changes in disease.

ALVIN J. COX, M.D.

CHRISTOPHER'S MINOR SURGERY—Eighth Edition—Edited by Alton Ochsner, M.D., F.A.C.S., Professor of Clinical Surgery, Tulane University School of Medicine; and Michael E. DeBakey, M.D., F.A.C.S., Professor of Surgery and Chairman of the Department of Surgery, Baylor University College of Medicine. W. B. Saunders Company, Philadelphia, 1959. 539 pages, $10.50.

This is the 8th edition of Christopher's Minor Surgery. This has for years been the authoritative book in the field of minor surgery and it has been adequately re-edited and kept up-to-date by Doctors Ochsner and DeBakey. The book is a good one on minor surgery and could be recommended to physicians wishing a ready answer to minor surgical problems.

The original nature of the work was extremely comprehensive with extensive quotations from numerous authors on each subject. The present editors, however, have chosen to give one simple clear answer to each problem, and the book's value is definitely enhanced by this simplification and shortening.

The difficulty with a book of this type is that many of the minor surgical problems have passed, in the intervening years, over into major surgical problems. The present scope of the subject matter is therefore limited and the simple answers of yesteryear no longer satisfy today's approach. This is particularly true in the field of peripheral vascular disease, fractures, extremity injuries, soft tissue tumors, and problems in the field of sepsis and burns. The scope of the book, therefore, is quite limited in respect to previous years. This detracts from the general value of a book of this type, but for the subjects that are covered, it is still an excellent work. Much of the material is better treated in standard books on fractures, general surgery, or good brief books in the various specialties. The book, therefore, is not as desirable or as practical to the practicing physician as it was a number of years ago when these fields of knowledge were simpler and less difficult from the standpoint of therapy. In its field, this is a good book and can be recommended to the general physician.

VICTOR RICHARDS, M.D.

* * *

BETWEEN YEARS, THE—Dedicated to Adolescents and Their Parents—Mark Lewis Gerstle, M.D., Chief Psychiatrist, California Youth Authority. Published by the State Department of the Youth Authority, 401 State Office Building No. 1, Sacramento 14. (Intended for placement in PTA establishments, schools and churches.)

In this diminutive booklet, a seasoned psychiatrist presents for popular consumption the distillate of his years of clinical experience with adolescents and their parents. Dr. Gerstle is Chief Psychiatrist of the California Youth Authority, which is the State Agency entrusted with the care and treatment of delinquent youth.

"The Between Years" is intended for distribution to parent-teacher establishments, schools, churches, and other groups of interested adults. It describes, in simple and graphic terms, the cardinal conflicts of the adolescent period, and, with wisdom and restraint, offers some broad guidelines for parental behavior. Particularly refreshing is an absence of mealymouthed pleas for unconditional acceptance and permissiveness. The understanding which Dr. Gerstle advocates throughout his presentation is always tempered with reminders of parental obligations to impose appropriate controls.

Dr. Gerstle's reasoning is psychodynamically sound, his observations clinically accurate, and his interpretations and advice clearly and understandably stated. The booklet is recommended to all physicians who have occasion to counsel parents of teenagers.

H. R. BRICKMAN, M.D.

CARE OF THE PATIENT WITH A STROKE—A Handbook for the Patient's Family and the Nurse. By Genevieve Waples Smith, R.N., M.A. Springer Publishing Company, Inc., 44 East 23rd St., New York 10, N. Y., 1959. 148 pages, $2.75.

This paper bound book consists of 12 chapters and 142 pages. It is written by a registered nurse whose husband was the patient and there is a foreword by Dr. Arthur C. Jones, M.D., Professor of Physical Medicine and Rehabilitation of the University of Oregon Medical School.

The material is presented for the lay reader who it is presumed is a relative or close friend of a patient with a stroke.

The material is well presented and accurate and should be of special value to lay people who are going to be responsible for the home care of a patient with a stroke.

* * *

DOCTORS AND PATIENTS—Stories by Leading American Physicians—Edited by Noah D. Fabricant, M.D. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, New York, 1959. 204 pages, $5.25.

One must say at the start that the material between these covers is rather slight and at best would do for bedtime reading before putting out the light. Every doctor has had numerous "memorable medical experiences and incidents" of this sort (foreword), which are usually freely shared at the luncheon table or over the beer and cheese. We wonder if this collection justifies its publication in book form; at any rate it makes pretty light reading.

ARTHUR L. BLOOMFIELD, M.D.

* * *

ANTIBIOTIC THERAPY FOR STAPHYLOCOCCAL DISEASES—Antibiotics Monographs No. 12. Edited by Henry Welch, Ph.D., Editor-in-Chief of Antibiotics & Chemotherapy and Antibiotic Medicine & Clinical Therapy, Washington, D. C.; and Maxwell Finland, M.D., Associate Professor of Medicine, Harvard Medical School; Associate Director, Thorndike Memorial Laboratory; and Physician-in-Chief, Fourth Medical Service, Boston City Hospital, Boston, Mass. Foreword by Felix Marti-Ibanez, M.D. Medical Encyclopedia, Inc., 30 East 60th Street, New York 22, N. Y., 1959. 208 pages, $4.50.

During the past decade increasing concern has been expressed over the problems of epidemic infections by drug-resistant staphylococci. This volume is a compilation of information about the drug treatment of staphylococcal infections. Individual contributors deal with "newer drugs" such as novobiocin, vancomycin, ristocetin and others. Several of these chapters are well considered and complete summaries, others appear to be less well conceived and balanced. One wonders what influenced the editors to let a concise and meaningful chapter on erythromycin (nine pages) be followed by a longwinded (57 pages!) review on oleandomycin "its derivatives and combinations." In about one tenth of that space it might have been stated that oleandomycin may be considered "a poor relative of erythromycin," that triacetyl-oleandomycin is the only available derivative comparable to erythromycin propionate, and that claims for fixed oleandomycin-tetracycline combinations have been condemned as false by many responsible and critical investigators.

The descriptions of individual drugs present the views held by the authors in the fall of 1958. Additional evidence and experience has accumulated since then and can be found in current medical literature. The most useful part of the volume for the practicing physician who seeks guidance for the management of staphylococcal infection is the "Recapitulation and Discussion" by Dr. M. Finland. His 13 pages deserve to be read by everyone.

E. JAWETZ

ARTERIAL WALL, THE—Edited by Albert I. Lansing, A.B., Ph.D., Chairman, Department of Anatomy, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania. Sponsored by The Gerontological Society, Inc. The Williams & Wilkins Company, Baltimore 2, Maryland, 1959. 259 pages, $7.50.

This monograph on the arterial wall is a superb contribution to the literature. It reviews currently available data on the structure, function and chemistry of the major components of the arterial wall as a background for those interested in atherosclerosis. It is a highly technical discussion which brings up to date a host of diverse studies dealing with such varying subjects as collagen and ground substance, elastic tissue, mucopolysaccharides as well as the metabolism of the arterial wall. Other chapters concern the study of arterial muscle, vascular endothelium, vaso vasorum and lipid metabolism of connective tissue. The nine chapters are all written by masters in the field and conclude with an up-to-date, pertinent bibliography.

In the opinion of the reviewer, this book is a landmark bringing together for the first time information from various disciplines with reference to the arterial wall. The varied discussions indicate that the arterial wall is highly complex, and as Dr. Dury states in his summation, each chapter in this volume presents a challenge and a promise of great reward to the more adventuresome investigators among biologists of all disciplines. The book clearly indicates that we have progressed beyond the stage of descriptive anatomy and into the visualization of the arterial wall as a biochemical and metabolic factory.

The book can be highly recommended to all investigators interested in fundamental studies on tissues. It has no direct clinical applications, but will be intensely interesting to the physician who wishes to have a fundamental grounding in the current basic approaches to understanding the arterial wall.

MAURICE SOKOLOW, M.D.

* * *

RELAXATION AND EXERCISE FOR NATURAL CHILDBIRTH—Second Edition—Helen Heardman, Diploma Bedford Physical Training College, Chartered Physiotherapist (Teachers' Certificate). Revised and Re-edited by the Obstetric Physiotherapists' Association of the Chartered Society of Physiotherapy. E. & S. Livingstone, Ltd., Edinburgh and London, 1959. Distributed in the United States by the Williams & Wilkins Co., Baltimore 2, Maryland. 31 pages, 75 cents. (Quantity discounts available on request.)

This is the second edition of this pamphlet written by Mrs. Heardman, a devoted disciple of the late Grantley Dick Read. The frontispiece asserts that the second edition is "Revised and Re-edited by the Obstetric Physiotherapists Association of the Chartered Society of Physiotherapy." After careful comparison of the first edition published in 1950 and the present one published in 1959 this reviewer is unable to discover any revision in this entire edition other than the addition of two and the deletion of one short insignificant sentence. Thus the motivation and justification for this second edition is perplexing. Admittedly there are some minor changes of a subtle nature:

(a) The pamphlet is now a meconium brown instead of blue.

(b) The publishers have extensively revised their ample advertisements which adorn the front and back pages of the pamphlet; no less than 17 books, plus their most favorable reviews, are promulgated for parental investment.

It is unfortunate that the same errors and poor writing which characterized the first edition appear unchanged nine years later. For example, Figure 3 on page 8 describing the normal position of the vertex in the pelvic inlet when labor begins, depicts an ROA position—quite an unlikely situation in the inlet—unless the pelvis is massive or the fetus minute.

Figure 1 on page 7 is an atrocious one-dimensional diagram of the pelvis evidently designed to confound and confuse.

Gobbledy-gook writing abounds: On page 19—"Therefore every time you empty your bowels, draw a breath as described, then hold it and finally bear down and use the expulsive act. You will find it easier with a stool of about a foot high . . ." The ambiguous use of the word stool stimulates the imagination to wonder why it is easier to expel an item of such dimensions.

On page 30 the expectant mother is introduced to the vicissitudes of the second stage of labor as follows: "Each time a uterine contraction occurs the effort to bear down is resumed and the mother realizes she is growing heated and perspiring exactly as if she were playing a strenuous game. She knows that soon a very obvious stretching feeling will be experienced which sometimes even amounts to a feeling of splitting open. This must not arouse alarm, as it is not painful when the muscles are prepared. It should be *appreciated*. . . ."

One wonders whether Mrs. Heardman really expects such a paragraph to instill a feeling of equanimity in the mind of the prospective mother. Another assertion that "she will seldom need or desire an anesthetic or analgesic" is certain to provoke unrest among obstetricians, not to mention our anesthesiologist confreres.

Page 24 has a most unusual explanation for the pain of a labor contraction: "Fear tightens the neck of the uterus and its lower part, so that the contractions push the baby against a resistance and that hurts."

Such unscientific and unsound statements are frequent and cause this reviewer to state that he is unable to recommend this pamphlet for the use of obstetricians or their patients.

JOHN V. KELLY, M.D.

* * *

ROENTGENOLOGIC DIAGNOSIS IN OPHTHALMOLOGY—Edward Hartmann, M.D., Chief of the Ophthalmic Department, Lariboisière Hospital and American Hospital in Paris, and Evelyn Gilles, M.D., Chief of the Roentgenology Department, Quinze-Vingt Ophthalmic Hospital; Associate in Roentgenology, Saint Antoine Hospital and American Hospital in Paris. Translated by George Z. Carter, M.D., Assistant Professor of Ophthalmology, Albert Einstein College of Medicine. Edited by Conrad Berens, M.D., F.A.C.S., Lecturer on Ophthalmology, New York University Post-Graduate Medical School; Advisory Attending Surgeon, New York Eye and Ear Infirmary; Consultant Emeritus, American Board of Ophthalmology. J. B. Lippincott Company, East Washington Square, Philadelphia 5, Pennsylvania, 1959. 375 pages, $15.00.

The first ten chapters of this monograph are concerned with the roentgen examination of the orbit and adjacent structures; the last five deal with examination of the sinuses, teeth, temporal bone, sella and cranial vault. Special procedures such as arteriography, ventriculography and encephalography are considered, and there is a section on lesions of the cervical spine.

The work is an evolution of a smaller monograph originally prepared by an ophthalmologist (Hartmann) but then rewritten in conjunction with a radiologist (Gilles). Since both men are French and practice in Paris, there is an understandable tendency to use European names for common roentgenological positions and to have a preponderance of the references to the European literature, chiefly Gallic. Nevertheless, the illustrations are of good quality (although in the negative), are accompanied by line drawings in many instances and neatly complement the text. The work should be of value to radiologists and eye specialists.

L. HENRY GARLAND, M.B.

CLINICAL COORDINATION OF ANATOMY AND PHYSIOLOGY—Martha Pitel, Ph.D., R.N., and Mildred Schellig, M.D. Springer Publishing Company, Inc., 44 East 23rd St., New York 10, New York, 1959. 320 pages, $5.50.

The basic concept of coordinating case histories and clinical conditions with learnings in anatomy and physiology is an excellent one. Anyone embarking upon the study of either or both would of necessity learn a great deal if he followed all the directions and made the interpretations outlined in this study guide and workbook. The authors have done a good job in this book and it should be of value in nursing education and as a supplement in the early phases of medical education. Exact use of the workbook and its applicability in any given course of instruction would have to depend upon the judgment of the individual instructor. There is a possibility that the workbook could be of value to the physical educator in his professional studies and it might be quite useful in the training of health educators in addition to its value in nursing or medicine.

Although the basic facts of anatomy and physiology change but slowly, the clinical applications and correlations may be more frequently modified. Certain portions of the workbook may need revision more often as a consequence. For example, on page 191 and in Figure 76 the back-pressure, arm-lift method of artificial respiration is described and illustrated. Perhaps it would have been better had the mouth-to-mouth method of artificial respiration been correlated with the anatomy and physiology involved. This is no great criticism, however, for the mouth-to-mouth method has only recently received widespread recognition. It might be more helpful to the student if the bibliographical references were placed at the end of each section with direct application to the topics therein rather than being arranged alphabetically at the end of the workbook.

OLIVER E. BYRD, M.D.

* * *

SYMPOSIUM ON GLAUCOMA—Transactions of New Orleans Academy of Ophthalmology, 1957—Editor, William B. Clark, M.D., F.A.C.S.; Diplomate, American Board of Ophthalmology; Professor of Clinical Ophthalmology, Tulane University School of Medicine, New Orleans, La.; Associate Editor, Joe M. Carmichael, M.S.J. The C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3, Missouri, 1959. 314 pages, with 99 figures, $13.50.

Glaucoma has become the paramount eye disease. Interest in glaucoma has intensified and steadily increasing experimental work is being done.

This symposium is the work of recognized authorities in this field. The assembling and editing of the subject matter has been carefully done. All phases of glaucoma are discussed.

No ophthalmologist has adequate knowledge about this subject. This book has gathered together the best of our present knowledge. Needless to say this book should be read by every ophthalmologist.

ALFRED R. ROBBINS, M.D.

* * *

BEHAVIORAL CHANGE IN THE CLINIC—A Systematic Approach—Gerald R. Pascal, Ph.D., Professor of Psychology, Director of the Clinical Training Program in Psychology and Director of the Psychological Service Center, University of Tennessee. Grune & Stratton, 381 Fourth Avenue, New York 16, N. Y., 1959. 128 pages, $4.75.

This book represents an attempt to found psychotherapy on learning theory as that theory has been elucidated in animal and human laboratories of experimental psychology. The author believes that such an approach "helps bridge the gap between what the student learns in general, experimental psychology taught as a biological science and what goes on in the psychologic or psychiatric clinic." It draws heavily on such concepts as generalization, reinforcement, and extinction. Illustrative cases are cited in support of certain points, but these do not constitute proof of the validity of the hypothetical system. This reviewer is quite sympathetic to the author's attempt to systematize psychotherapeutic concepts, but there still remains serious question of the comprehensiveness of the proposed system and its pertinence to various kinds of psychopathology.

There are no statistics presented, and the formulae which appear are essentially shorthand statements of propositions, consisting of a set of hypothetical constructs illustrated in the chapter on "E" (environment), the chapter on "P" (prophylaxis), and other places in the volume. In discussing the search for relevant stimuli the author states: "Somewhere between the obvious and the obscure lie the stimuli in which we are interested. We cannot hope to define them adequately. We can only hope that we can find those stimuli which are at once plausible and lend themselves to manipulation"!

Clinical psychiatry has made many advances by purely clinical observation, through non-laboratory and non-experimental methods, and in the process has undoubtedly picked up a number of false hypotheses which in turn may be corrected by further clinical experience. Laboratory methods can contribute a great deal, however, and perhaps rectify some false clinical impressions; but they cannot entirely replace the clinical approach.

This book will be of much greater interest to psychologists than to physicians.

ALEXANDER SIMON, M.D.

* * *

SYNOPSIS OF OPHTHALMOLOGY—William H. Havener, B.A., M.D., M.S. (Ophth.), Professor and Chairman, Department of Ophthalmology, Ohio State University; Member, Attending Staff, University Hospital, Columbus, Ohio; Consultant, Veterans Hospital, Dayton, Ohio. The C. V. Mosby Company, 3207 Washington Blvd., St. Louis 3, Missouri, 1959. 288 pages, with 189 illustrations, $6.75.

This book is a manual to be used by the general practitioner or student. The outline and chapter arrangement is efficient. The subject matter is well chosen by an experienced teacher. Chapters XV and XVII are innovations which set this book apart from similar text books. This book is easily and quickly read. It also provides concise and useful information.

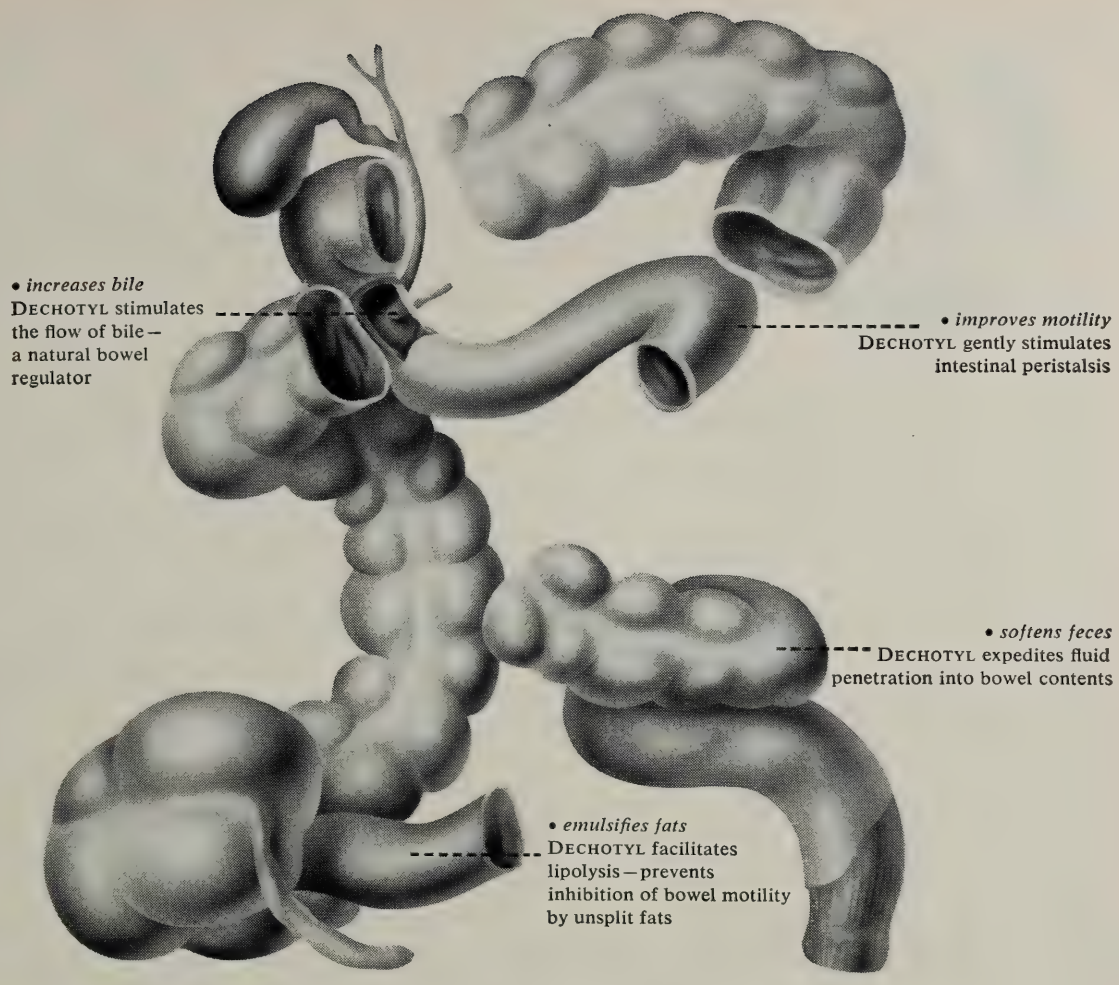
ALFRED R. ROBBINS, M.D.

* * *

PRACTICAL GUIDE FOR GENERAL SURGICAL MANAGEMENT, A—Julian A. Sterling, M.D., Sc.D., F.A.A.A.S., F.A.C.G., F.A.C.S., F.I.C.S., et al.; Diplomate, American Board of Surgery; Assistant Professor of Surgery, Graduate School of Medicine, University of Pennsylvania. Foreword by Herbert R. Hawthorne, M.D. Vantage Press, Inc., 120 W. 31st Street, New York 1, New York, 1959. 67 pages, $3.00.

This is a very brief, simple book, listing in didactic form the types of orders that should be given pre-operatively and during the immediate post operative period for a variety of common surgical procedures. Since these orders vary from surgeon to surgeon and from surgical service to surgical service at each hospital, it is doubtful that the book would be of any real value for anyone except those working in the University of Pennsylvania environment. So little material is contained in it that it would not be of value to the physician engaged in the care of the ordinary surgical problem. It might be helpful to an intern, trying to leave, for the first time, pre and post operative surgical orders, but otherwise there is not enough in the book to warrant its recommendation to the general reader.

VICTOR RICHARDS, M.D.

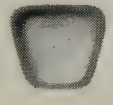


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Knowing Causes Helps Prevent Food Poisoning

The causes of food poisoning—a particular hazard in warm weather—were outlined in the February 27 *Journal of the American Medical Association.*

An undertanding of the causes is helpful in preventing the illness.

The main cause of food poisoning is bacteria which contaminate the food by multiplying or forming a poisonous substance. When eaten, the food produces acute illness of short duration.

Food poisoning caused by staphylococci bacteria is "the most common type encountered in the United States," according to the *Journal* article.

When the bacteria is present, only time and the correct temperature are needed to cause an outbreak. At a warm temperature food can become poisoned in five to seven hours in some cases. The foods usually involved in this type of poisoning are ham, cream-filled bakery goods, cheddar cheese, dry skim milk, poultry, and potato salad.

The symptoms of staphylococcic food poisoning —nausea, vomiting, diarrhea, acute prostration, and abdominal cramps—appear within a few hours after the food is consumed.

Another bacteria that can cause food poisoning is salmonella.

"Salmonellae are abundant in nature and are found most commonly in the intestines of poultry and swine," the article said.

"They are present on the shell of eggs, and, when eggs are broken commercially, they find their way into frozen whole eggs, yolks, whites, and in dried egg products."

The foods usually involved in salmonella poisoning are inadequately cooked egg products, poultry, or other foods. The symptoms it produces are abdominal pain, diarrhea, chills, fever, frequent vomiting, and prostration.

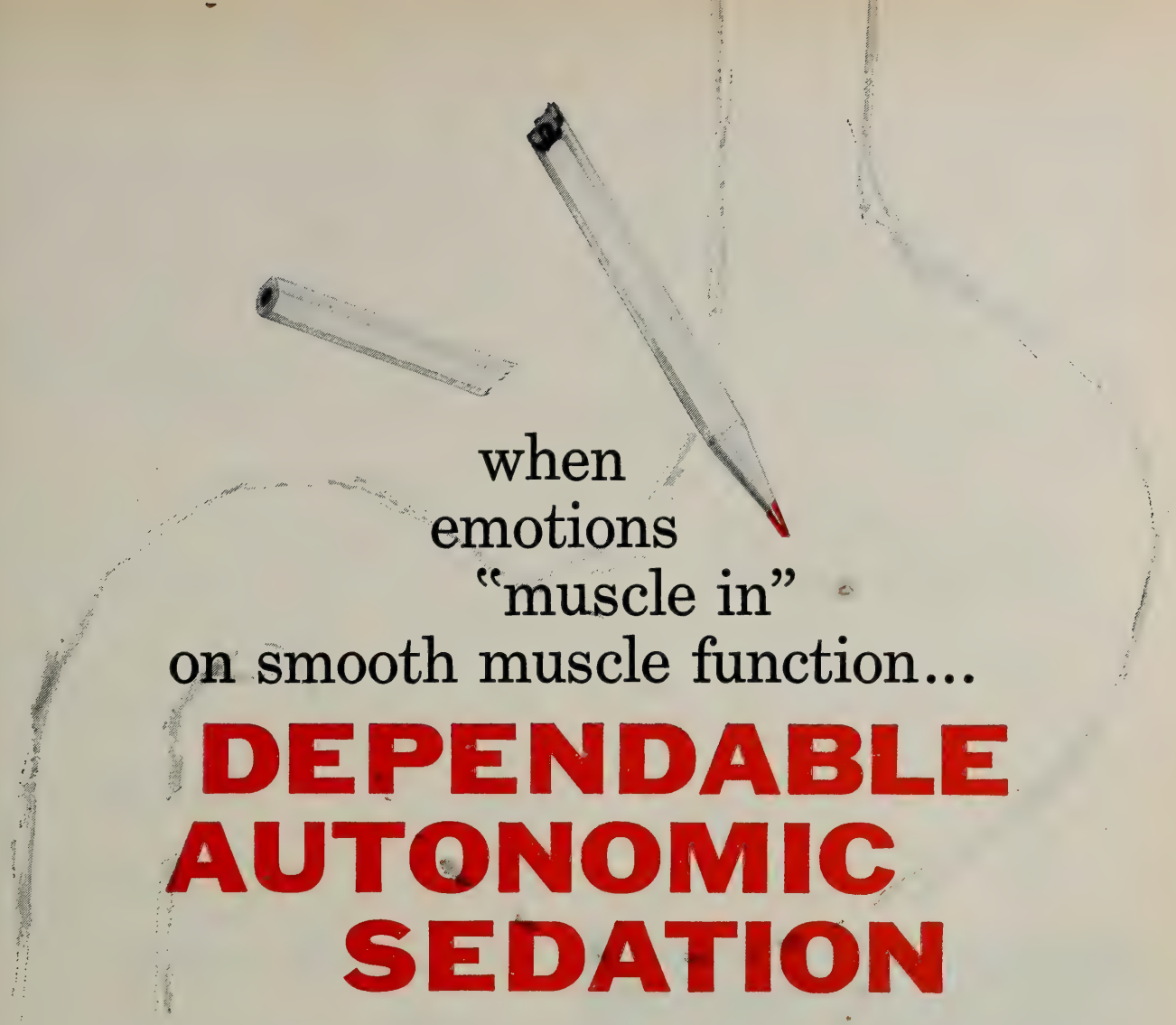
Several other types of food poisoning can be caused by starch foods inadequately refrigerated and by poultry and meat products cooked and left unrefrigerated at a warm temperature for several hours.

A rare and often fatal type of food poisoning is botulism.

"In the United States the majority of outbreaks of botulism are related to the consumption of inadequately processed home-canned vegetables of low-acid content such as string beans, beets, and other vegetables," according to the *Journal* report.

The symptoms are difficulty in swallowing, double vision, difficulty in speech, and difficulty in respiration, followed by death from paralysis of the muscles of respiration.

The article was prepared by Dr. G. M. Dack, professor of microbiology and director of the Food Research Institute at the University of Chicago, as a report to the A.M.A. Council on Drugs.



when
emotions
"muscle in"
on smooth muscle function...

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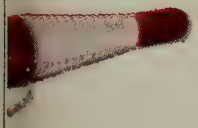
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Stroke Patients' Outlook Improved

An estimated two million persons who have suffered strokes are alive today, and the outlook for stroke patients has "markedly improved" in the past five years, a New York heart specialist reported.

In an interview reported in *Today's Health*, published by the American Medical Association, Dr. Irving S. Wright, Cornell University Medical College, New York, said that even in 1954, "the approach of the medical profession was one of hopelessness. It was just too bad but the stroke patient was stuck with what he had."

Now, he added, "a great catalytic movement is taking place." Hundreds of researchers are working in the field of strokes, and both knowledge and treatment of stroke conditions have advanced a great deal.

Dr. Wright said that figures from a 10-year study by Columbia and Cornell Universities and Bellevue Hospital on treatment of the acute phase of first strokes, "suggest that for survival alone there's an improvement of about one-third by using anticoagulants in treatment of thrombosis."

The figures, he added, are almost the same as those from a study of the treatment of coronary thrombosis with anticoagulants made under the auspices of the American Heart Association.

(Continued on Page 94)

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Basic Electrocardiography	Two Weeks, May 16
Advanced Electrocardiography	One Week, June 20
Surgery of Colon and Rectum	One Week, June 20
General Surgery	One Week, May 23
Gallbladder Surgery	Three Days, June 20
Surgery of Hernia	Three Days, June 23
Board of Surgery Review, Part II	Two Weeks, Aug. 8
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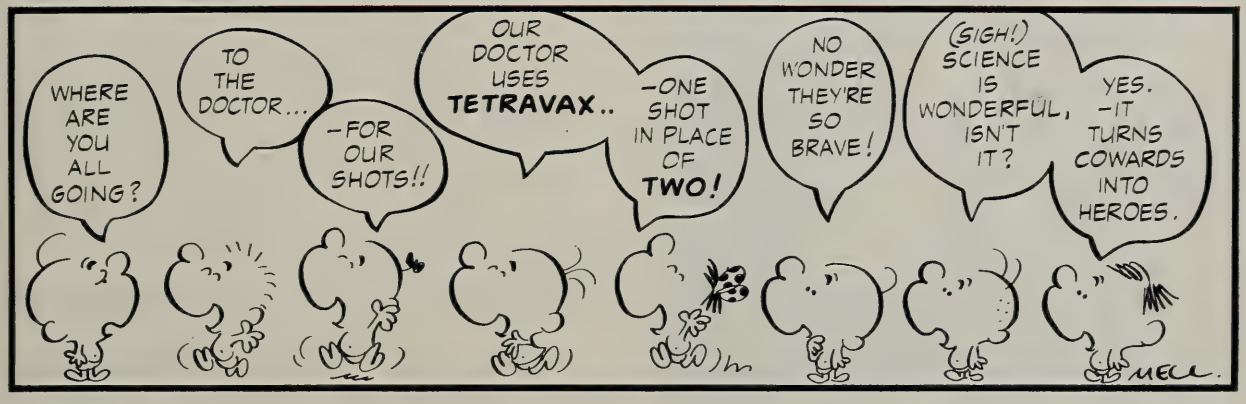
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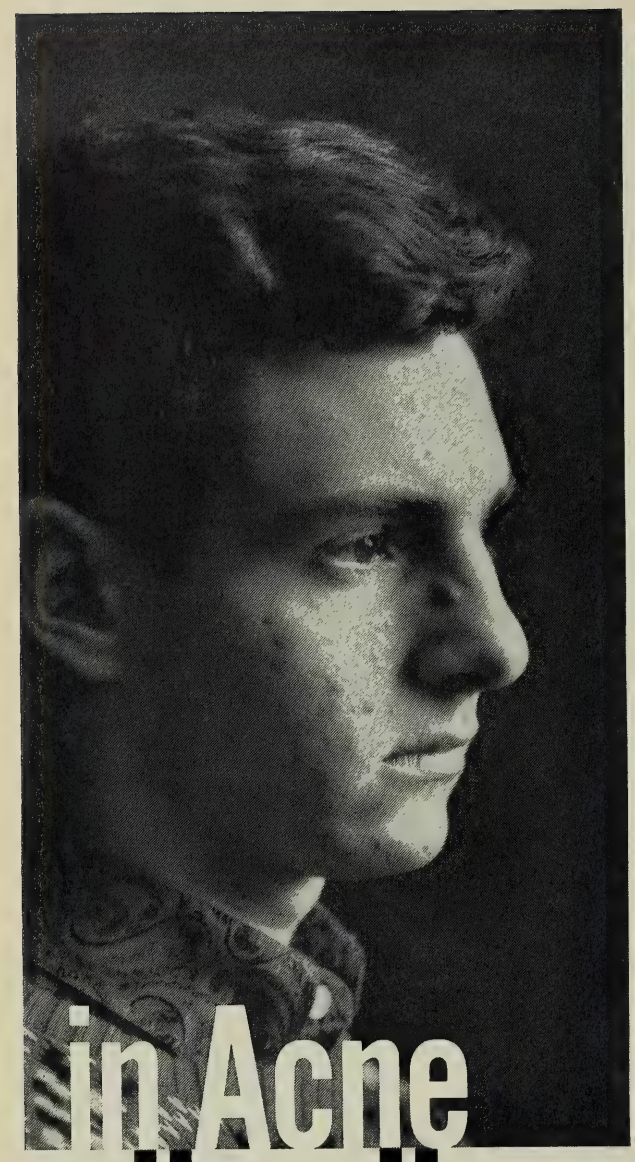
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1. Smylie, H. G.; Webster, C. U., and Bruce, M. L.: *Brit. M. J.* 2:606, Oct. 3, 1959. 2. Hodges, F. T.: *GP* 14:86, Nov., 1956.

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Stroke Patients' Outlook Improved

(Continued from Page 86)

Anticoagulants activate blood enzymes which tend to disintegrate blood clots. For long-term treatment, they can be taken orally, Dr. Wright said.

Tracing the development of strokes, Dr. Wright pointed out that they are caused when a blood vessel supplying the brain becomes clogged, usually with a blood clot. Innumerable combinations of brain and body damage can occur. Depending upon which area of the brain is affected, a person may have a stroke without knowing it. When blood from a clot leaks into the brain area, a hemorrhage occurs.

Men, especially those with hardening of the arteries, seem to develop stroke symptoms earlier than women, he added. The sex difference tends to even up to some degree after menopause because women lose protection from their hormones.

"Anticoagulants will be much more widely used, as with heart disease," predicted Dr. Wright. "I think it can be said that the risk of a second stroke can be reduced markedly by keeping the patient on anticoagulants, provided that the original stroke was due either to an embolism [clot carried by the blood current] coming from the heart or to a clot forming within the brain."

Anticoagulants should never be given to a patient with a hemorrhagic or "bleeding" stroke, he cautioned.

Dr. Wright made these other observations about strokes:

Rehabilitation: "Workers are most enthusiastic about their ability to get the patient to utilize muscles and nerves which are intact. Further studies are underway. But the patient must still know he is wanted in order to have the will to get well."

Stress: "Some physicians have taken the position that heart attacks, like strokes, are largely produced by . . . stress in our civilization. I doubt this. The evidence for this is poor and there are many other factors, such as hormones or diet, for which the evidence is far better."

Diet: "I don't think we're yet in a position to advise a drastic change in our national diet." However, obese persons or those with high blood cholesterol should keep their fat and cholesterol intake down.

Exercise: "Physical exercise within reason is good for people. The evidence suggests that this does them no harm and may even help to protect them against heart attacks and strokes. After such attacks, of course, activity has to be well controlled."

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References:
(1) Barnes, R. H.: J. A. M. A. *166*:898, 1958. (2) Ressler, C.: J. A. M. A. *165*:135, 1957. (3) Birnberg, C. H., and Abitbol, M. M.: Obst. & Gynec. *11*:463, 1958. (4) Robillard, R.: Canad. M. A. J. *76*:938, 1957.

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Non-Polio Viruses Contributed To Detroit Polio Epidemic

Non-polio viruses played an important role in causing the 1958 Detroit polio epidemic.

Gordon C. Brown, Sc.D., Ann Arbor; Willard R. Lenz, M.D., Detroit, and George H. Agate, M.D., Lansing, made a comprehensive report on the epidemic in the February 20 *Journal of the American Medical Association,* based on laboratory tests on 1,060 of the 1,200 cases.

The study involved "probably the greatest percentage of victims of a large epidemic of poliomyelitis ever to be subjected to laboratory investigation," the researchers said.

They found that two viruses, other than the polio virus, caused more cases of nonparalytic disease than the polio virus. They were the ECHO and Coxsackie viruses, of which there are many types. This pointed up the need for a new vaccine.

"Since these viruses can apparently cause a paralytic type of disease in an occasional person, consideration should be given to the development of preventive vaccines for certain of these agents," they said. "This is especially important for pregnant women, in view of the increasing recognition of neonatal [newborn] deaths caused by Coxsackie B viruses. . . ."

The symptoms associated with ECHO and Coxsackie virus infections were virtually indistinguishable from those of nonparalytic polio, they reported.

"The occurrence of ECHO and Coxsackie virus infections was not influenced by poliomyelitis vaccination," they said.

However, the study "clearly shows that most of the virus-confirmed cases of poliomyelitis had occurred in persons who had received no poliomyelitis vaccine.

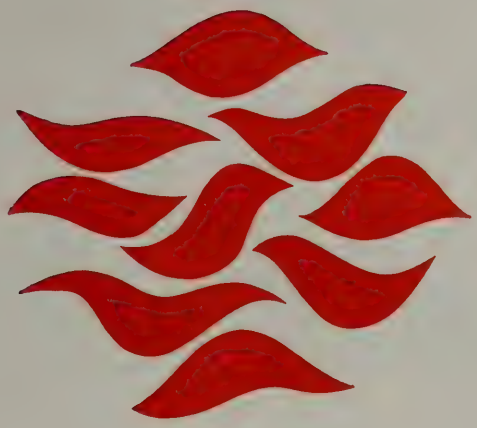
"This was apparent not only for the paralytic cases but also for those classified as nonparalytic."

On the other hand, examinations for muscle weakness 60 days after the onset of illness indicated there was no association between vaccination and findings of improved muscle condition.

The researchers further stated that an analysis of patients, both paralytic and nonparalytic, from whom no virus could be isolated strongly suggested that the polio virus was not the cause of illness "in a large number" of them.

The study also showed that virus-confirmed cases of polio occurred predominantly in younger persons while Coxsackie and ECHO virus infections were much more evenly distributed by age.

Dr. Brown is associated with the department of epidemiology and virus laboratory, School of Public Health, University of Michigan. Dr. Lenz is with the communicable disease division, Herman Kiefer Hospital, Department of Health. Dr. Agate is associated with the acute communicable disease section, Michigan Department of Health.



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A.M.A. Initiates Action On Medical Scholarships

The American Medical Association initiated action on the establishment of a scholarship program for medical students with the appointment of a special study committee.

William F. Norwood, Ph.D., chairman of the division of legal and cultural medicine, College of Medical Evangelists, Los Angeles, was named staff director of the committee.

Dr. Norwood has been associated with the College of Medical Evangelists School of Medicine since 1933. From 1950 to 1951 he took a leave of absence to serve as a staff associate in a survey of medical education sponsored by the American Medical Association and the Association of American Medical Colleges.

The House of Delegates, policy-making body of the American Medical Association, in December adopted a resolution that a scholarship fund should be established to aid deserving students to enter the field of medicine and that such a fund be backed by the American Medical Association as a primary sponsor. It acted on the recommendation of the American Medical Association Council on Medical Education and Hospitals which reported it had found sufficient evidence of a real need for a scholarship program.

"Most educators and college counseling offices believe that a significant number of well-qualified men and women are being deterred from entering medicine as a career because of financial considerations," Walter S. Wiggins, M.D., Chicago, secretary of the council, said, adding: "Superior students are being attracted into more lucrative and easily attained careers.

"The tasks assigned to this committee are of signal importance because it is urgent for medicine to develop and implement a program which will provide adequately for the future medical needs of our nation."

Dr. Wiggins said the committee also will seek ways to solve the over-all problem of increasing medical education facilities to keep pace with the nation's ever-expanding population and the growing demand for medical service.

Specifically, the committee was empowered to:

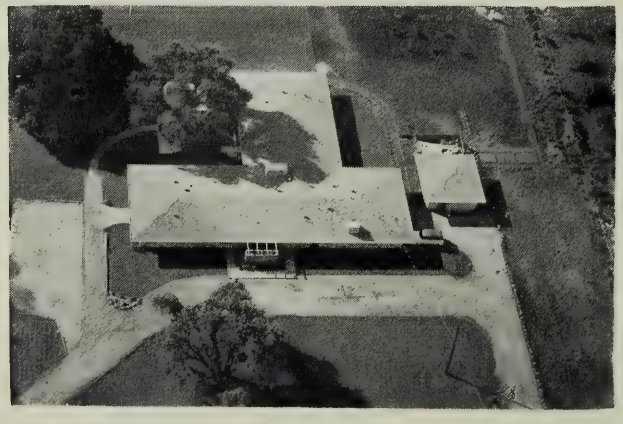
—Present a scholarship program, its development, administration, and the role of the American Medical Association in fulfilling it.

—Ascertain the maximum to which medical schools could expand their student bodies while maintaining the quality of medical education.

—Ascertain what universities can support new medical schools with qualified students and sufficient clinical material for teaching—either on a two-year or a full four-year basis.

(Continued on Page 102)

Woodside Acres Hospital

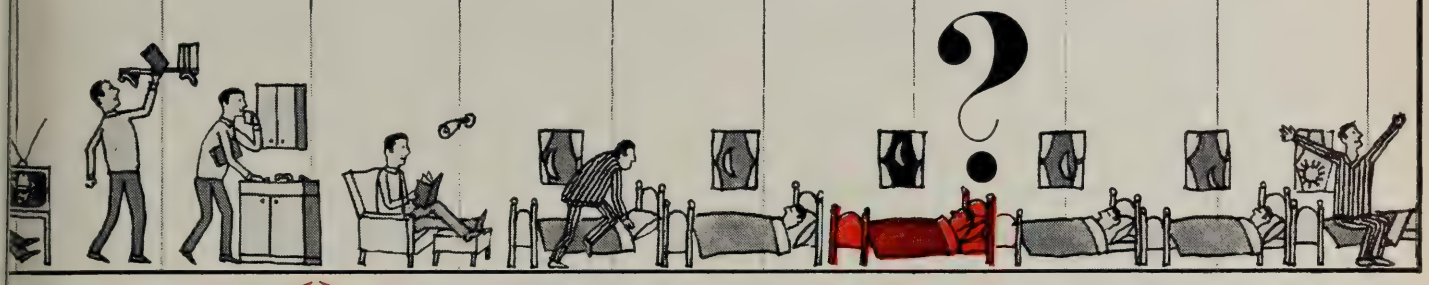


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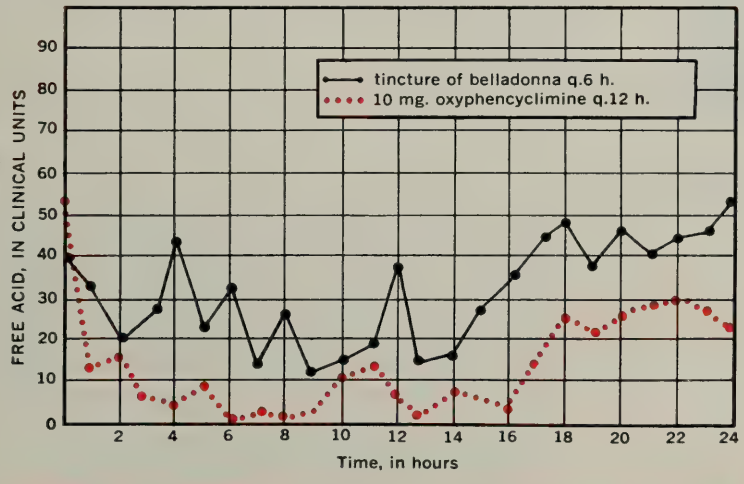
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References: 1. McHardy, G., et al.: J. Louisiana M. Soc. 111:290 (Aug.) 1959. 2. Steigmann, F.: Study conducted at Cook County Hospital, Chicago, Illinois, in press. 3. Kemp, J. A.: Antibiotic Med. & Clin. Therapy 6:534 (Sept.) 1959. 4. Leming, B. H., Jr.: Clin. Med. 6:423 (Mar.) 1959. 5. Data in Roerig Medical Department files.

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A.M.A. Initiates Action On Medical Scholarships

(Continued from Page 98)

—Investigate the securing of competent medical faculties.

—Investigate financing of expansion and establishment of medical schools.

—Investigate financing of medical education as to the most economical methods of obtaining high quality medical training.

—Develop methods of getting well-qualified students to undertake the study of medicine.

—Investigate the possibility of relaxing rigid geographic restrictions on the admission of students to medical schools.

Dr. L. S. McKittrick, Brookline, Mass., who is chairman of the council, will serve as chairman of the committee. Other council members on the committee are Drs. W. Clarke Wescoe, dean of the University of Kansas School of Medicine, and John Z. Bowers, dean of the University of Wisconsin Medical School.

Three members of the House of Delegates named to the group are Drs. Willard A. Wright, Williston, N. D.; Charles G. Hayden, Boston, Mass., and Charles L. Hudson, Cleveland, Ohio.

Drs. James Z. Appel, Lancaster, Pa.; Julian P. Price, Florence, S. C., and Hugh H. Hussey, Jr., dean of the Georgetown University School of Medicine, Washington, D. C., all members of the Board of Trustees, also were named to the committee along with two other medical educators, Drs. John Mitchell, dean of the University of Pennsylvania School of Medicine, Philadelphia, and William R. Willard, dean of the University of Kentucky School of Medicine, Lexington.

A twelfth member of the committee remains to be appointed. The group will make its first report at the annual meeting of the A.M.A. in Miami next June.

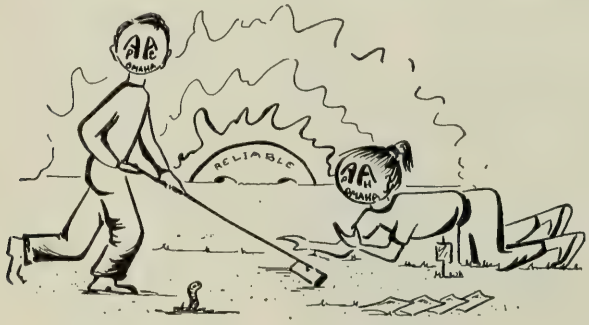


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Ototoxicity of Kanamycin

G. Garrido Lecca, M.D., Jorge Terry, M.D., Luis Maggiolo, M.D., and Alejandro Morales, M.D., Lima, Peru, writing in the *Journal of the American Medical Association*, reported that severe and apparently permanent loss of hearing was observed in three patients who received kanamycin in the treatment of serious infections. One man, aged 46 years, received 40 gm. in the course of 16 days; another, aged 62, received 14 gm. in the course of 7 days. In these cases tinnitus preceded the impairment of hearing. A woman aged 55 received 14 gm. in two courses separated by an interval of five days. In her case there was no warning tinnitus. In all cases the deafness progressed after administration of the kanamycin was stopped; loss of hearing has been practically complete, and no improvement has been found at later examinations.

Nine Physicians Endorse New Resuscitation Technique

An "improved" and "simplified" method of oral resuscitation was recommended recently by nine physicians in the February 20 *Journal of the American Medical Association.*

"After one year of these coordinated studies in over 1,000 anesthetized human beings, results of use of the head-tilt oral method, with inflation through the victim's nose, have been uniformly satisfactory except in the group of newborn infants, which involves special problems," the article said.

The physicians suggested that the revised technique replace the old mouth-to-mouth method. The head-tilt method works better than any other field method of emergency artificial respiration and should be tried first in all cases, they said.

Nasal inflation is preferred, they said, since it prevents air from getting into the victim's stomach. It also is best suited for the victim whose jaws are too tightly clenched to be opened.

By tilting back the victim's head, his air passages are opened, they pointed out.

Another advantage of the new method is that it prevents air leakage between the rescuer and victim, according to the nine physicians.

Using the old method, the rescuer held the victim's mouth open with his thumb and this allowed some air to escape. Under the new method, the rescuer holds the victim's mouth closed during mouth-to-nose breathing and presses his cheek against the victim's nostrils, if necessary, to prevent leakage during mouth-to-mouth breathing.

The revised technique also is more easily taught and remembered, the article said.

"Experience has shown that it can be taught and practiced in a few minutes, with minimal discussion of the anatomy of the air passages."

At the same time, the physicians said they felt oral airways for resuscitation, such as tubes and

(Continued on Page 108)

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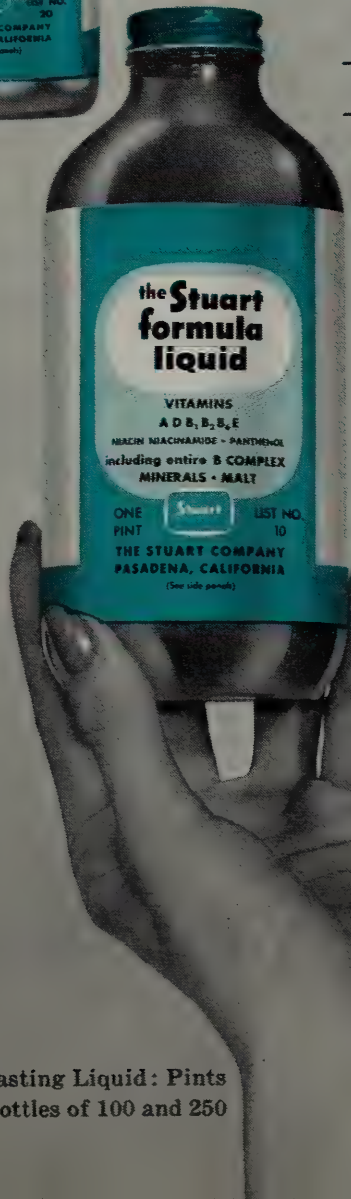
TABLET

Two tablets, suggested daily dose, contain: VITAMINS: 10,000 USP Units, A; 1000 USP Units, D; 100 mg., C; 5 mg., B_1; 5 mg., B_2; 0.2 mg., B_6; 1 mcg., B_{12} as IONEX 12*; 30 mg., Niacin and Niacinamide; 5 mg., d-Calcium Pantothenate; 0.3 I.U., E; Yeast and desiccated liver added as sources of natural vitamin B complex factors.

**Stuart's absorption-enhancing complex of vitamin B_{12} (B_{12} from cobalamin).*

MINERALS: 200 mg., Calcium; 0.75 mg., Copper; 0.15 mg., Iodine; 15 mg., Iron; 5 mg., Magnesium; 1 mg., Potassium; 0.3 mg., Zinc; 1 mg., Manganese.

LIQUID



One tablespoonful (15cc.) suggested daily dose, contains: VITAMINS: 10,000 USP Units, A; 1000 USP Units, D; 4 mg., B_1; 4 mg., B_2; 0.2 mg., B_6; 30 mg., Niacin and Niacinamide; 4.3 mg., d-Panthenol; 0.3 I.U., E; MINERALS: 15 mg., Iron; 0.15 mg., Iodine; 1 mg., Manganese; Malt added as source of natural vitamin B complex factors.

Pleasant tasting Liquid: Pints
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Nine Physicians Endorse New Resuscitation Technique

(Continued from Page 106)

masks, which have been placed on the market, should not be used by untrained laymen. They said such devices have been promoted and sold without official medical approval or the approval of organizations traditionally responsible for endorsement of methods of artificial respiration.

Instructions for the head-tilt method are:

—Lift the neck of the victim.

—Tilt the head as far back as possible by holding the crown of the head with one hand. Sufficient tilting usually opens the victim's mouth.

—Pull the chin upward.

—Inflate the lungs through the nose or mouth or, in an infant, through the nose and mouth.

—Remove your mouth to let the victim exhale passively.

In babies and children, care must be taken to pull the chin upward, without exerting pressure on soft tissues, which could encroach on the air passages.

If desired, the victim's shoulder may rest continuously on the rescuer's knee during resuscitation.

Small victims, particularly after submersion in water or obstruction by a foreign body in the upper airway, should be inverted and, if necessary, sharp blows applied between the shoulder blades to help dislodge the offending material.

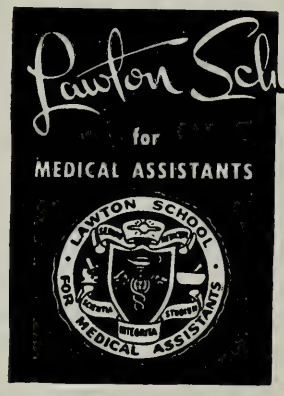
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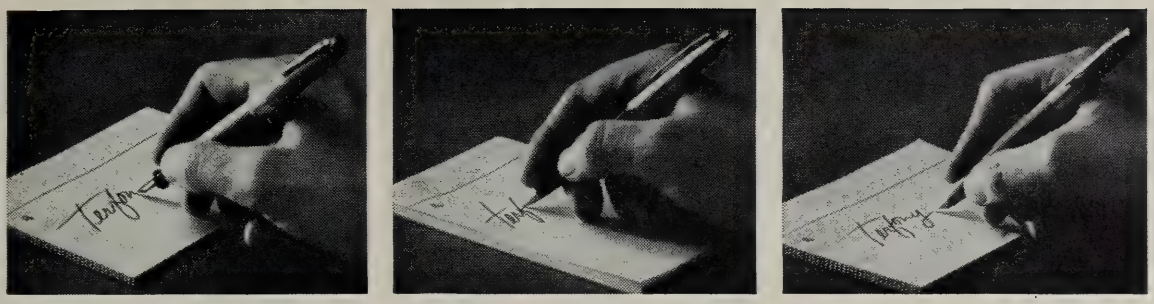


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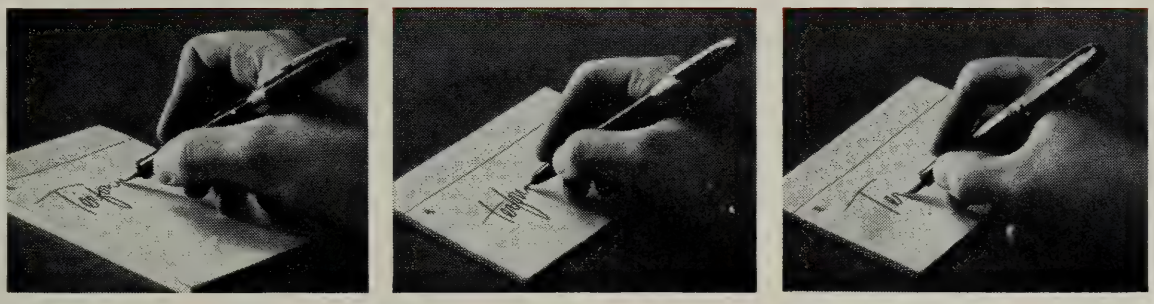
Ferrous Fumarate (Iron)	150 mg.	Vitamin B-12 (Cobalamin conc. NF)	2 mcg.
Deep sea oyster shell (Calcium)	600 mg.	Folic Acid	0.25 mg.
Vitamin C	50 mg.	Niacinamide	10 mg.
Vitamin A	4000 USP Units	Vitamin K (Menadione)	0.25 mg.
Vitamin D	400 USP Units	Rutin	10 mg.
Vitamin B-1	2 mg.	Sodium Molybdate	3 mg.
Vitamin B-2	2 mg.	Fluorine (Calcium Fluoride)	0.25 mg.
Vitamin B-6	0.8 mg.	Iodine (Potassium Iodide)	0.15 mg.

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President's Health Better Now Than Before Taking Office

President Eisenhower is in better physical condition now than when he took office despite his age and the three major illnesses he has suffered, *Today's Health* magazine said recently.

"People who know the President are convinced that . . . he is in better shape today than when he entered the White House," Ernest L. Barcella, Washington bureau manager of United Press International, wrote in the April issue of the American Medical Association publication.

Mr. Eisenhower, facing his 70th birthday in October, soon will become the oldest president in the nation's history.

His amazing recovery from a heart attack, ileitis, and a small stroke is "one for the medical books—a living legend of remarkable physical comebacks, of astonishing stamina and energy reserve," Barcella said.

"By all medical odds, the President long since should have put on his slippers, retired to a rocking chair, and called it a career," he said. "Instead . . . he has undertaken a staggering load of work and travel."

The President has succeeded by virtue of discipline and determination, according to Barcella, who added:

"Discipline very likely saved his life; discipline in his health habits—diet, rest, emotions, exercise, work, temperance."

These were some of the points in Mr. Eisenhower's fitness program described in the article:

—The President, who had been a three-pack-a-day smoker, gave up cigarettes "instantly and completely" in 1949.

—He learned "to raise his boiling point a number of degrees" to control his temper.

—He adheres to a strict low-fat, low-calorie, high-protein diet, and now weighs roughly what he did as a football player at West Point.

—He restricts his drinking to diluted Scotch highballs.

—He has become "the world's Exhibit A on golf's therapeutic value to a cardiac patient."

—He is an early-to-bed, early-to-rise man.

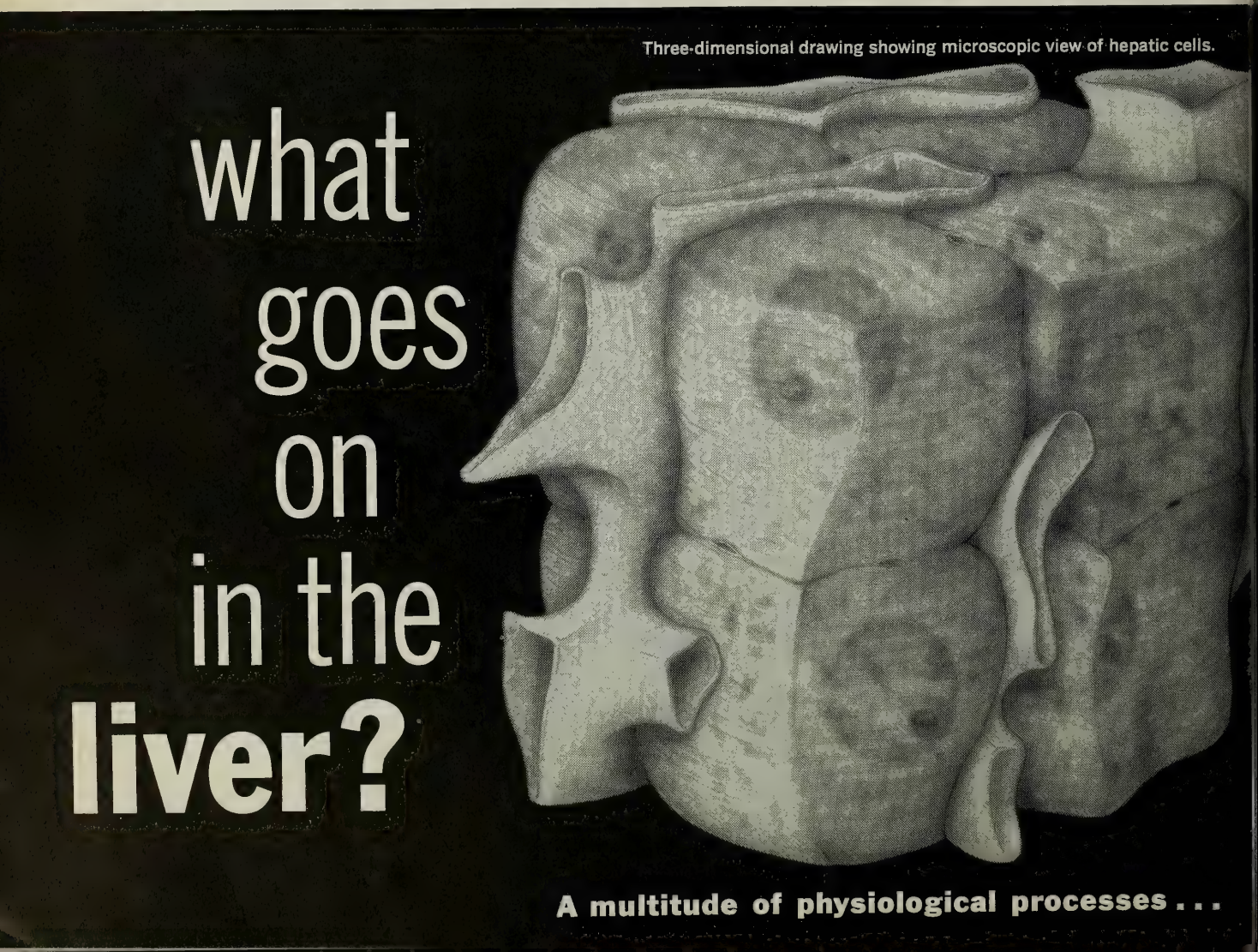
—He gets into condition for trips by resting a few days beforehand.

—During his travels, he applies the old Army rule —"get sleep when and where you can."

"A number of other psychological or spiritual factors fit into the pattern of the President's well-being," Barcella said. "The jaunty spirit, the bouncy step, the robust good health he radiates are reflections of the inner man.

". . . this much is certain—no president ever

Three-dimensional drawing showing microscopic view of hepatic cells.



enjoyed his last months in office more; none rode a greater crest of popularity and good will; none commanded more universal affection.

"In the view of some who have known him over the years, his coronary thrombosis may have been something of a blessing in disguise for the President. The judgment is that the attack taught him how to take the best care of himself—better than he ever had before; taught him how really precious health is."

Modern Medical Know-How Could Not Have Saved Lincoln

Could doctors have saved Abraham Lincoln's life 95 years ago with present-day medical knowledge and equipment?

The answer is no, according to an article in a recent issue of *Today's Health,* published by the American Medical Association.

"Even if Lincoln had been given the best of modern treatment, it is universally admitted that all efforts would have been in vain," Otto Eisenschiml, Litt.D., author of several Lincoln books, wrote in the A.M.A. magazine.

Eisenschiml said the fact that Lincoln survived for about 10 hours after he was shot by John Wilkes Booth in Ford's Theater, Washington, D. C., April 14, 1865, is considered "remarkable." He said it can only be attributed to his extraordinary vitality and the intelligent measures taken by a 23-year-old Army surgeon, Dr. Charles A. Leale.

Dr. Leale was the first physician to reach the wounded President. Finding him unconscious from an obviously severe brain injury, the young doctor tried to revive him by breathing into his mouth and by pouring a small amount of diluted brandy between his lips. A fluttery pulse could then be felt.

The President was taken to a boarding house across the street from the theater where efforts were made to ease the pressure on the brain. Later an unsuccessful probe for the bullet was made although extraction of the bullet was not seriously considered.

Dr. Leale and two other attending physicians then were forced to conclude that they had done all they could to stay the inevitable end.

Today's physicians would have followed virtually the same procedure.

"In spite of their vastly improved techniques, they could do little more than had been done by the medical men almost a century ago," Dr. Eisenschiml said.

"But if by some miracle Lincoln's life had continued, he would have been totally blind, at least partially paralyzed, subject to meningitis and epilepsy."

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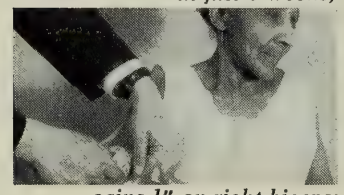
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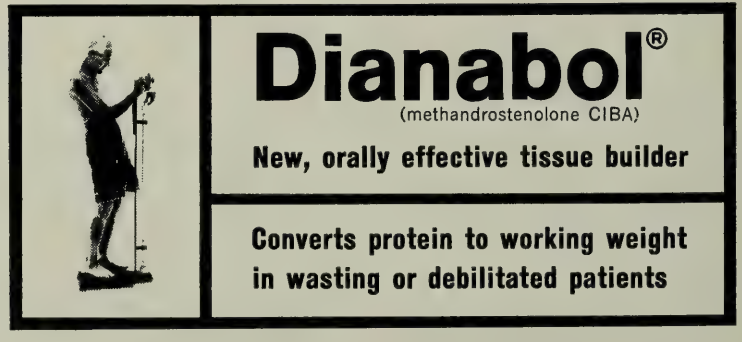
Dianabol is a new tissue-building agent with distinct advantages over previous compounds of this type.

By aiding the deposition, synthesis, and utilization of protein, Dianabol affords these benefits in the underweight elderly patients with or without serious disease and in patients who are chronically ill or convalescent:

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- Speeds healing of wounds; hastens postoperative recovery and convalescence from a variety of diseases.
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- Improves general physical status; helps to revive a sense of well-being.

Economical, convenient to administer, and almost without virilizing effects, Dianabol overcomes the disadvantages that have restricted use of tissue-building compounds in the past. Older patients, whose funds are often limited, will particularly welcome the low cost of Dianabol therapy. Dianabol is contraindicated in prostatic carcinoma.

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Brain Defect Corrected By Tiny Plastic Balls

A rare operation in which tiny plastic balls were inserted in the bloodstream to correct a large arterial malformation in the brain was reported in the March 12 *Journal of the American Medical Association.*

The authors of the article, Drs. Alfred J. Luessenhop and William T. Spence of the department of surgery (neurosurgery), Georgetown University Medical School, Washington, D. C., said it was the first reported operation of its kind.

The patient was a 47-year-old woman who had suffered periodic fainting spells since childhood. For 15 years prior to the operation she had episodes of numbness and weakness in the right arm and leg, some loss of movement in her right fingers, and a slight speech impairment.

The operation consisted of inserting four plastic balls, ranging from 2.5 to 4.2 mm. in diameter, in the internal carotid artery located in the neck. The balls were carried by the bloodstream to the site of the abnormal arteries. Once there they blocked the flow of blood, removing the malformation from the circulatory system.

Seven weeks after surgery the patient was able to write legibly with her right hand and at no time during her postoperative course was there any re-

(Continued on Page 30)

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Virtually Uniform in vitro Susceptibility of Staphylococcus aureus

99.5% of isolates (214 of 215) from patients with staphylococcal infections—including many antibiotic-resistant strains—proved sensitive in vitro to ALTAFUR in tests conducted across the nation.[3] **99.7%** of staphylococcal isolates (334 of 335) at a large general hospital—including many antibiotic-resistant strains—proved sensitive in vitro to ALTAFUR.[4]

Wide, Stable Antimicrobial Spectrum

"Because of its relationship to previously developed nitrofurans, it is anticipated that [ALTAFUR] will retain its original spectrum after longstanding clinical usage."[5] Development of significant bacterial resistance to ALTAFUR has not been encountered to date.[6]

Minimal Side Effects

Side effects are easily avoided or minimized by these simple precautions: 1) *alcohol should not be ingested in any form, medicinal or beverage, during* ALTAFUR *therapy and for one week thereafter* 2) each dose should be taken with or just after meals, and with food or milk at bedtime (to reduce the likelihood of occasional nausea and emesis).

1. Weiner, A. L.: Paper presented at the Conference on Recent Advances in the Treatment of Chronic Dermatoses, University of Cincinnati (Ohio), Nov. 5, 1959. 2. Compiled by the Medical Department, Eaton Laboratories, from case histories received. 3. Christenson, P. J., and Tracy, C. H.: Current Therapeutic Research 2:22, 1960. 4. Glas, W. W., and Britt, E. M.: Proceedings of the Detroit Symposium on Antibacterial Therapy, Michigan and Wayne County Academies of General Practice, Detroit, Sept. 12, 1959, p. 14. 5. Leming, B. H., Jr.: Ibid., p. 22. 6. Investigators' reports to the Medical Department, Eaton Laboratories.

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Brain Defect Corrected By Tiny Plastic Balls

(Continued from Page 26)

currence of the speech impairment or numbness, the surgeons reported.

Dr. Luessenhop said the operation to a large degree was a test of his theory that arteries leading to such a malformation are greatly enlarged compared with the arteries to the surrounding brain, and consequently there is a far greater flow of blood to the malformation than to other parts of the brain.

Most of these malformations receive their blood supply primarily or solely through the middle cerebral artery, he said. This artery, being the natural continuation of the internal carotid, forms the route of the blocking agent, he added.

The size of the object will keep it from passing into small arteries of the brain, he pointed out.

If such an object could be retrieved, he said, the same process could be used to treat certain types of enlarged arteries in the brain.

Soviet Polio Vaccine Inferior to U. S. Type

A live polio vaccine produced in Russia—the first to be tested in this country—has proved inferior to those being used in the U. S.

Dr. Gordon Meiklejohn of the University of Colorado School of Medicine, Denver, recently revealed results of a study of the Soviet vaccine in the *Journal of the American Medical Association.*

"Russian vaccines have not previously been tested in the United States," he said.

The Russians, he said, have concentrated on live polio vaccines, which are made from live but weakened polio viruses and administered by nasal inhalation. Vaccines used in this country are made from dead polio viruses administered by injection.

(No live poliovirus vaccine has been licensed for use in this country, although field trials are under way.)

In the Colorado study, 27 volunteers from the staff and student body of the medical school were given the Russian vaccine. The results were compared with a similar group who had received an American-made polio shot.

Researchers found that the U. S. inactivated vaccine and the Russian live vaccine were about equally effective in producing antibodies to fight polio in persons who had no detectable antibodies before the vaccines were administered.

"In producing a booster effect in persons who had antibody before vaccination, the live vaccine appeared to be inferior to the inactivated vaccine," Dr. Meiklejohn said.

"While the data presented here tend to support the generally held opinion that inactivated vaccines are preferable to live vaccines, it seems advisable to conduct further comparative studies . . .," he said.

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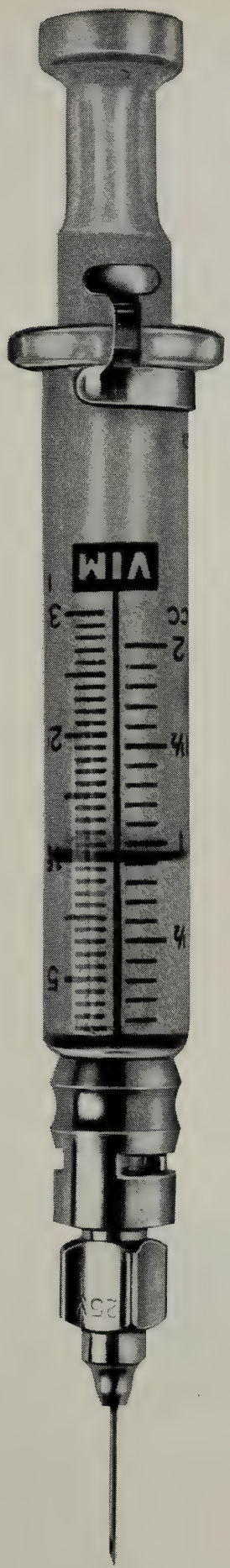
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Hospitalization of Child Easier When Mother Goes Along

The emotional shock that may occur when a child is hospitalized can be overcome when the mother stays with him, according to a New Haven, Conn., pediatrician.

Writing in the *Journal of Diseases of Children* published by the American Medical Association, Dr. Albert J. Solnit of the Child Study Center and department of pediatrics, Yale University, said "hospitalization of the child with the mother has served to overcome both physical and psychological difficulties.

"For young children and their parents, the hospital environment has represented a psychological hazard. The children are threatened by separation from their parents, fears of abandonment, and painful, frightening procedures in the hands of strangers.

"Since the mother may have the best access to the distorted fears of the young child, she can most effectively reassure her child . . ."

Therefore, Dr. Solnit said, the mother is not replaced by the nursing or medical staff. On the contrary, he said, the physician and nurse help the mother take care of her child.

Oral Therapy Reduces Diabetic's Insulin Needs

Treatment of mouth diseases in diabetics has been found, in some cases, to reduce their insulin requirements.

Capt. Ralph C. Williams, Jr., a physician, and Maj. Charles J. Mahan, a dentist, of the U.S.A.F. Hospital, Maxwell Air Force Base, Air University, Montgomery, Ala., reported on the effects of oral therapy in nine diabetics in a recent issue of the *Journal of the American Medical Association.*

"Seven of the nine patients with diabetes and periodontal oral disease who underwent elective periodontal therapy showed significant subsequent reduction in insulin requirement," they said.

Insulin is used to control diabetes. The nine patients suffered an inflammation of the gums or the tissues surrounding a tooth, in addition to diabetes. They were treated by surgery or extraction of teeth.

"Recently we have been impressed by the striking frequency with which the relatively young diabetic patients seen in a military practice manifest extensive periodontal disease . . . ," they said.

Although there are conflicting theories on what causes periodontal disease, they said, it was their "impression that diabetes and chronic, destructive periodontal disease are separate entities," but added:

"Diabetes may be adversely influenced by the presence of periodontal disease, and conversely periodontal disease may be more severe in the diabetic state."

Dr. Williams is now on the staff of the medical service, Massachusetts General Hospital, Boston.



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New Vaccine Provides Broader Protection Against Flu

A new influenza vaccine designed to provide broader protection against future virus variants was recently described in the *Journal of the American Medical Association.*

Keith E. Jensen, Ph.D., Terre Haute, Ind., reported on a study conducted among institutionalized children and adults to determine the merits of a new vaccine formula containing six strains of flu viruses compared with the current four-strain standard vaccine.

"The data obtained from our study indicate that vaccines containing six strains are efficacious and, further, that a new formula for a vaccine which includes . . . each of these strains would be as safe but more potent than the current four-strain . . . standard vaccine," he said.

"Its use would cause, particularly in children, formation of immunological barriers of greater breadth against new influenza-virus variants."

Children showed better results than adults from the six-strain vaccine. Jensen explained that most children have little, if any, natural antibodies to fight flu viruses whereas adults develop antibodies from previous exposure to the infection.

"It is now clear that children can be provided with antibody complexes comparable to those found in older adults by immunization with a six-strain vaccine," he said.

However, he said, the study showed that persons infected even in the recent past may be susceptible to reinfection and therefore should also be vaccinated.

In an accompanying editorial, Jensen said influenza is expected to continue to cause epidemics and new variants are expected to arise periodically.

"The Asian variant can be expected to prevail for several more years before being replaced by a different type A virus," he said.

"Since severity and extent of an epidemic cannot be predicted accurately, annual vaccination is recommended for all age groups."

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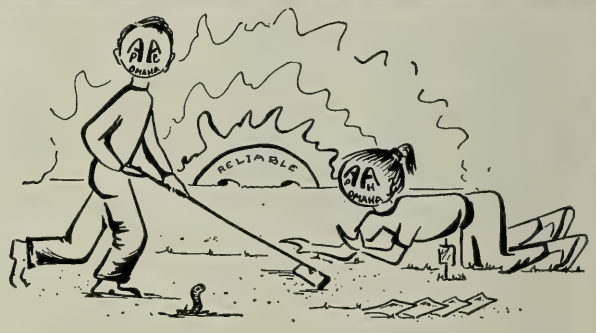
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New Psychotherapeutic Drug Brings Impressive Results

A new psychotherapeutic drug, methaminodiazepoxide (Librium), has produced "impressive" results in the treatment of various mental disorders, Dr. Titus H. Harris, a Galveston, Texas, psychiatrist said recently.

In a preliminary communication in the March 12 *Journal of the American Medical Association*, Dr. Harris said the drug reduces anxiety and agitation but does not cloud consciousness or impair intellectual function.

"My experience with its use in all types of anxiety, such as convulsive disorders, tension states, obsessive-compulsive conditions, agitated depressions, and jitters in alcoholics indicated that methaminodiazepoxide is one of the most interesting drugs of its type that has been developed," he said.

"Of special interest is its apparent effectiveness in obsessive-compulsive neuroses, which have thus far defied chemotherapeutic management."

Dr. Harris said the drug exerts three primary actions—tranquilization, muscular relaxation, and anticonvulsant effect.

"At a recent symposium . . . investigators in a number of medical specialties, including internal medicine, cited impressive results obtained from use of methaminodiazepoxide in a variety of conditions and a freedom from side-effects at therapeutic dosage levels," he said. "These investigations confirm my findings. . . ."

The drug was described as "one of a new class of compounds" by Dr. Harris, chairman and professor of the department of psychiatry and neurology, University of Texas Medical Branch. He said its unique action on vicious, agitated monkeys, dingo dogs, and other wild animals prompted the first clinical trials.



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1-41 a list of the above references will be supplied on request.

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A Report on the Current Treatment of Burns

The many ointments recommended for the treatment of major burns are of "little practical value," according to Dr. Isidor S. Ravdin, Philadelphia surgeon.

In a report prepared for the American Medical Association's Council on Drugs, Dr. Ravdin said, "In fact, many of the agents which have been used to promote healing have been shown to be detrimental to epithelization."

"The only worthwhile place for a specialized burn ointment (if such an ointment exists) seems to be on a small superficial burn for the immediate relief of pain," he continued.

The best dressing for a serious burn is "still a fine-mesh gauze lightly impregnated with an innocuous bland ointment," he said. However, the "open method of treatment," in which no dressing is used and the dried skin serves as the bandage, is gaining more and more acceptance.

He pointed out that antibiotics have little value in the local care of the burned wound; however, the general use of them to prevent overwhelming systemic infection is of great value. One of the most frequent causes of death in serious burns is from a late-developing general infection.

The use of cortisone and corticotropin has been discontinued almost entirely, he said, since they have been proved to be of no use in speeding healing.

The best method of cleaning the burned area, if this is necessary, is still by washing with surgical soap and sterile water or a salt solution. The best way to remove foreign material and dead skin is still achieved by time or the surgeon's scalpel, he said.

One of the most difficult problems in serious burns is the treatment of shock. This is handled by the giving of fluids—plasma, whole blood, water or salt solutions, usually intravenously.

Large quantities of salt are necessary in the early phase of treatment because of the rapid loss of sodium by the body. If the salt solution can be given orally, a weaker solution not only is better tolerated but also eliminates the necessity of giving extra water intravenously.

Local agents to control pain are no longer used. Gentleness in the care of the patient and early removal of dead skin with early grafting of new skin, provide the best means of making the patient comfortable, he concluded.

Dr. Ravdin is professor of surgery at the Hospital of the University of Pennsylvania.

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Statistics Prove Sex Hormones Aid Victims of Breast Cancer

The first statistical proof that sex hormones can prolong the life of women with disseminated breast cancer was published in the March 19 *Journal of the American Medical Association.*

An exhaustive 12-year study also showed that female hormones (estrogens) were "inherently superior" to male hormones (androgens) in treating cancer that has spread from the breast. At the same time the findings disproved a number of commonly held beliefs concerning hormonal therapy.

"The relative effectiveness of these two classes of sex steroids has been determined in physiologically homogeneous groups of such size as to permit statistically valid conclusions for the first time," according to Dr. Ian Macdonald, Los Angeles, chairman of the American Medical Association Subcommittee on Breast and Genital Cancer.

The *Journal* article is the final report on the study initiated in 1947 under the sponsorship of the American Medical Association. Clinical data on 944 women with disseminated mammary carcinoma was pooled from a cross-section of investigators in the United States and Canada. The purpose was to clarify the use of sex hormones which came into use in the '40s.

"It [the study] will undoubtedly serve as a base line for comparative evaluation of studies which are under way in the field of cancer," Dr. Macdonald said.

"The most significant and most consistent phenomenon in the behavior of the disease under hormonal treatment, both by androgens and estrogens, was the increased survival time of patients in whom objective regression of disease occurred," the researchers reported.

The average survival period of those who did not respond to hormone treatment ranged from 8 to 11 months following the initiation of the treatment, which was about the same as that for those receiving no treatment.

However, for those who responded to the treatment, the survival time ranged from 18 to 27 months.

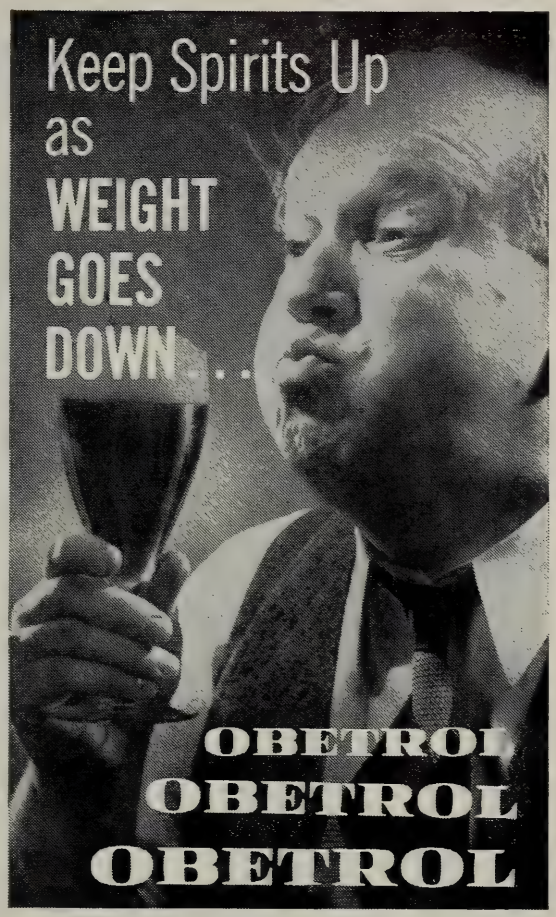
"Further," the report said, "the estrogens now must be recognized as inherently superior to androgens in a qualitative fashion and by a significant degree."

The frequency of tumor regression among 580 patients treated with androgens was 21.4 per cent. The frequency of a measurable decrease in cancer among 364 patients treated with estrogens was 36.8 per cent.

The estrogen-treated patients also survived for a longer period of time than did those treated with androgens. Those who responded to estrogens lived for an average of 27.3 months, compared with 19.1 for those given androgens.

The female hormones were given only to women

(Continued on Page 70)



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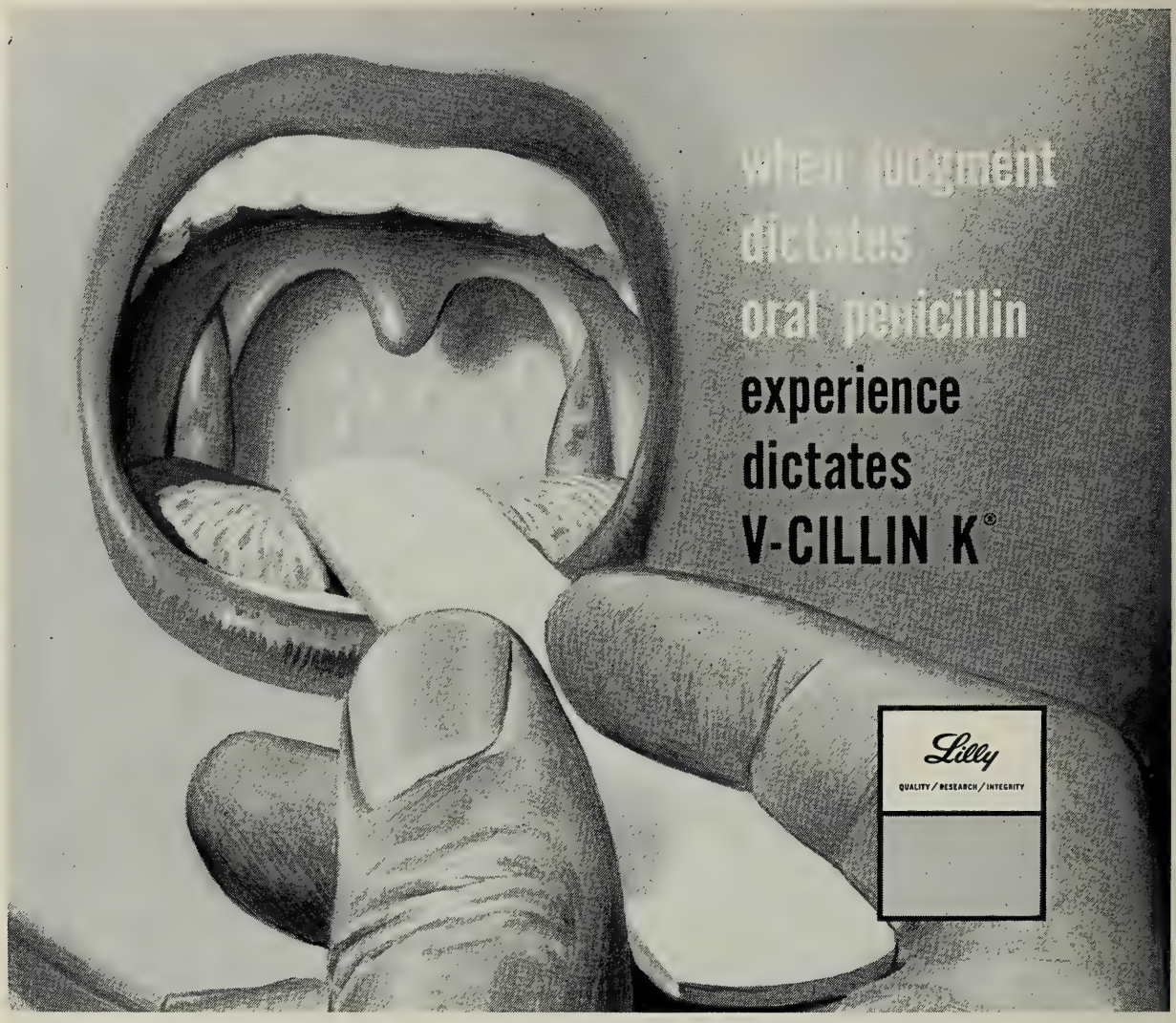
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1. Griffith, R. S.: Comparison of Antibiotic Activity in Sera Following the Administration of Three Different Penicillins, Antibiotic Med. & Clin. Therapy, 7:No. 2 (February), 1960.

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Volume 92 MAY 1960 Number 5

The Coroner and the Common Law

I. Introduction

JESSE L. CARR, *M.D.*, San Francisco

ONE OF THE STATUTES of the State of California (Section 27491 of the California Government Code) declares, "It shall be the duty of the coroner to investigate, or cause to be investigated, the cause of death of any person reported to the coroner as having been killed by violence, or who has suddenly died under such circumstances as to afford a reasonable ground to suspect that his death has been occasioned by the act of another by criminal means, or who has committed suicide."

In addition to this basic statement, there is much more to this section of the California Government Code. It establishes the manner in which the investigations may be conducted, and it outlines the powers of the coroner in the effective pursuit of his duties. Together with similar sections of the codes of the several counties, it further authorizes and defines the coroner's official activities.

While this codification of the duties of the coroner is relatively new in California,* the office itself and the statutory authorization to inquest are among the most ancient of English common laws, from which many of ours are derived. The office of coroner is so old, in fact, that the actual date of its beginning is unknown, but it is one of the many old Saxon institutions which were adopted by the Normans after their conquest of England and so found their way into the English statute books.

Regardless of the date of its origin, the office of coroner is one of the few remaining offices in the modern scheme of things that has persisted with little change both in England and in much of America since the English colonists arrived in this country carrying with them many legal precepts of the old country. The original title *custos placitorium coronal* (keeper or guardian of the crown) was eventually corrupted to "cornaus," then through various transitions became "coronator," "crowner," and finally in the fourteenth century, "coroner." The coroner was an officer of the crown and he was one of the first of the king's legal assistants.

As early as 925, the office of coroner is mentioned in the Athelstan Charter to Beverly. This was an honorable office, and none but a lawful and discreet knight was chosen as crowner. The founding of the office and its investment with authority were in part due to the anxiety of the people over the increasing powers of the sheriffs. The coroner was required to keep an exact record of the pleas of the crown, thus obtaining the duties of recorder. He was charged in addition with the responsibility of confiscating revenues due the king by the forfeiture of chattels belonging to felons, and as such was a collector of internal revenue. He inquired into all felonies. In

Submitted November 16, 1959.

Part I of an article in five parts. Others will appear in succeeding issues.

*The Coroner's Act was passed by the California Legislature in 1876.

instances where homes had been feloniously entered and violated he was required to "proceed immediately" to the scene of the entry and conduct an investigation of the robbery. In this capacity he assumed certain police powers. The coroner had the major burden among the king's officers of bringing criminals to justice, and consequently was known as a conservator of the peace. At one time in English history he was required to inquire concerning "treasure trove" and to report his findings to the king. He heard accusations and appeals from accusations of rape, examined wounds and investigated mayhem. He pronounced judgment upon outlaws and in this capacity became an advocate. He was empowered to pursue persons (besides the principal culprits) who had foreknowledge and had not given warning in cases of murder or burglary.

The coroner was responsible for carrying out regulations concerning deodands—that is to say, the things or chattels that caused death by misadventure, such as an ox that killed a man. It was the duty of the coroner to seize the deodand and have it or its monetary value forfeited to the king. If a man were drowned at sea an entire vessel might be forfeited. As late as 1838, a coroner's jury levied a deodand forfeiture of 1,500 pounds on the boiler of the S.S. *Victoria*, which had exploded and caused a loss of life. These forfeitures were generally bestowed upon the church for the good of the soul of the persons deceased, in the manner of alms. This legal principle and its legal sequence of conviction and indemnification represent the beginning of our present system of industrial compensation.

The coroner was also required, on behalf of the crown, to seize all the goods and chattels of those who were found guilty of suicide—suicide at that time being a felonious crime. In certain circumstances he was also concerned with other fiscal rights of the crown and at times performed part of the duties of tax collector.

Although charged by law with these numerous duties, many coroners of the day devoted the major portion of their attention to securing profit for the crown rather than searching for the truth in felonious matters or inquiring into the mechanisms of violence and causes of unexplained deaths. With the passage of time and for various reasons the office of coroner lost much of its power. Accumulated experience led to a clearer definition of the duties of the various officers of the king, and many of the duties of the coroner were delegated to other agencies. With police responsibilities expanding as society became more complex, a more elaborate scheme of law enforcement was developed and the police powers of the coroner declined, except where the office was combined with that of sheriff. Tax collecting became a specific, distinct and increasingly important necessity, for which a separate office was established. Many of the other miscellaneous functions of the coroner's office were also assumed by other existing bureaus or newly developed departments.

The judicial functions of the coroner were eliminated by the adoption of the Magna Charta in 1215, the abrogating clause stating, "No sheriff, constable, coroner, or other of our bailiffs shall hold pleas of our Crown." The statute De Officio Coronarius (for Edw. I, Statute II) redefined the coroner's powers and duties; and although later repealed, this statute forms the basis for our modern laws regulating the coroner's responsibilities. The office may still be, and often is, combined with that of sheriff of the same county, or with that of public administrator. In such a dual role, the coroner retains much of his historic importance, for he may simultaneously assume the responsibilities of all three offices. It is also, perhaps, of interest to remember that in his singular capacity the coroner is still the only state or county official who has the power to arrest the sheriff.

As originally established after the Magna Charta, the coroner's office had both the power of inquest and the power of investigation. With the evolution of more modern systems of legal investigation and law enforcement, the investigating powers of the coroner's office were assumed by the police, and the coroner was reduced to the single duty of holding an inquest, which was only a fact-finding procedure. He was without other authority either judicial or punitive and his findings were not admissible as evidence in a superior court of law. The many limitations reduced the coroner's office to so low a level of responsibility that it lost much of its public dignity and esteem. It became obvious that the office could not function effectively without the power of inquiry, and in 1926 the powers of investigation were reconferred upon the coroner in the United States. From this time to the present there has been a gradually expanding, and recently a rapidly growing, recognition of the importance of the functions of the office of coroner, or medical examiner.

Throughout the past centuries repeated studies of the coroner's office have been made and the qualifications of the coroner have been recurrently evaluated. Innumerable investigators and fact-finding boards have made reports and recommendations. There has been general accord in these reports that the relationship of the coroner to the public should be clarified—in some respects specifically altered—and that the facilities of the office should be further developed and improved. Because of the similarity of the legal systems in England and in the United States, the many expressions of dissatisfaction with the structure and stature of the office and the urge

to investigate the problems have had not only a long historical background but a wide international basis. In 1825, Thomas Wakeley, then the editor of a London newspaper, bitterly opposed the system of appointing attorneys, undertakers and ignorant laymen to coronerships. Like many reformers, he felt that he would make a good incumbent, and he did. He was elected to the office of coroner in 1839 after spending a fortune during the preceding 14 years of electioneering. He was 23 years in office, constantly fighting for reform and improvement. It was through his efforts that the coroner in England customarily is a practitioner of medicine.

English legal tradition has a strong influence upon the American system and, following this early example, Philadelphia in 1839 elected a doctor of medicine to hold the office of coroner—the first physician-coroner in the United States. Although such enlightened precepts were transmitted from the mother country to our eastern seaboard rapidly, their extension to the rest of the country was remarkably slow. Even at this writing only ten states of our fifty have statutes that make the degree Doctor of Medicine a prerequisite to holding the office of coroner. Since that day in 1839 in Philadelphia, which is one of outstanding importance in medicolegal history, repeated investigations have reported and described the weaknesses of our coroner's system and made recommendations for correction. Unfortunately, as is the case with so many investigations, good or bad, the reported context has had little influence on public officials, on legislators or on their constituency, the public.

Three states have taken action after receiving the recommendations of their respective study groups. In 1877 a medical examiner system was established in Massachusetts by a law which provided that medicolegal examinations of each county should be done by "able and discreet men, learned in the science of medicine." The act also stipulated that they be appointed for a period of seven years by the governor of the state and that their investigations were to be concerned with the "dead bodies of such persons only as are supposed to have come to their deaths by violence." An autopsy was to be performed by the medical examiner when "it was authorized in writing by the District Attorney, Mayor, or Selectman of the district." In 1915, the legislature of the State of New York established the office of Chief Medical Examiner in New York City. According to the act, he and his assistants had not only to be doctors of medicine, but trained pathologists as well. The chief medical examiner was to compete for his office in free and open examination, the successful candidate being appointed by the mayor for life. He, in turn, was to have the privilege of appointing his assistants. The constituency of Iowa, in 1959, after the state legislature eliminated the coroner's office there, instituted a statewide medical examiner system.

Even with this extraordinary example of progress in these instances, the office of coroner generally deteriorated elsewhere. In 1926, a survey was made by Raymond Moley into the coroner's system of the State of Missouri, a state that does not require the coroner to be a physician. (Missouri serves as an example only because of the specificity of the Moley investigation.) Moley found among the men holding the office of coroner in the State of Missouri music dealers, candy makers, farmers and a number of other persons of widely diversified talents and sometimes dubious occupations. Most commonly he found that the office of coroner was held by a mortician who sought the position because, as coroner, he often had privileged information, early contact with the families of deceased persons, and jurisdiction over the body in question. He had a place to keep it and, by virtue of possession, he had a competitive advantage over others in his business. Far from being an exception, the State of Missouri is typical of the majority of states. Moley found that the office of coroner was losing, or had lost, much of its dignity and influence. This was in part due to the lack of requirement that persons who might accede to the office must have special knowledge—this despite the extraordinary powers which the coroner might have. Conduct in office of many incumbents also at times degraded the reputation of the office. With such decline in public esteem it was often difficult to enlist good candidates for the office. There have been instances in which no candidate appeared for election unless the office was combined with that of sheriff, which carried more authority and the right to collect fees, or with that of public administrator, wherein the elected official had an opportunity to acquire accessory income by administering estates for a percentage.

Until recently, academic interest in medicolegal problems has been meager. In only specific areas have offices been given enough financial and moral support to attract well trained and competent candidates.

The American Medical Association in 1943 directed a special investigation into the procedure, administration and accomplishments of the current medicolegal systems, but neither their investigation nor the passing of 17 years since the Moley investigation produced much that was new. In 1944, when the report was published, it contained the conclusion that throughout most of our country legal medicine was used less effectively in the administration of justice than in any comparable country in the world.

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Conservative management programs may suffice in milder cases. Aspirin or other salicylates and physical therapy are the mainstays in such programs.

The antimalarial drugs may be helpful in a small proportion of cases. Steroids have had beneficial effect rather consistently and, with the newer analogues, certain side effects have become less troublesome. The usual precautions with the use of these compounds must be observed as always. Chrysotherapy remains important in the treatment of severe cases, and its use should not be postponed until major destructive joint changes have occurred.

RHEUMATOID ARTHRITIS is a disease characterized by spontaneously occurring remissions and exacerbations. A variety of factors may produce alterations in the course of the disease but exactly what they are and how they function remains unknown. Because of the fluctuations both in the degree of joint inflammation and in the extent of concomitant constitutional reaction, evaluation of any treatment program is extremely difficult. However, observations made on large numbers of patients over the course of many years of treatment have established the value of several therapeutic agents as well as certain principles of management. The advent of commercially available steroids ten years ago marked a major therapeutic advance. Chrysotherapy had been available for some 20 years before that. Whether or not the appearance of the antimalarial agents has provided any real additional assistance remains subject to some question.

Each introduction of a new steroid in the past few years has been heralded as the long awaited panacea for all rheumatoid arthritis. As experience with the newer analogues has accumulated, it has become apparent that the physiologic but undesirable side effects characterizing the earlier drugs have remained. Certain notable exceptions include the lessened or minimal mineralocorticoid effects of the delta 1 steroids, methyl prednisolone, triamcinolone and dexamethasone, and the diminished gluconeogenic effects of dexamethasone. The usual care in the selection of patients and precautions in administration of these agents must be exercised as always.

The purpose of this paper is to discuss a realistic program of medical management for patients with rheumatoid arthritis of varying degrees of severity and to evaluate some factors of importance in the selection of an appropriate program.

There is no specific treatment or cure for rheumatoid arthritis. Even if there were, the principles of management in a conservative program of treatment would remain of prime importance. Preservation of joint function, decrease of inflammation, and prevention, wherever possible, of permanent destructive changes are the basic goals.

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Many patients with early or mild disease may have a favorable response to a conservative regimen of management. Whether or not the natural course of the disease is altered by such a program cannot be proven statistically.[11] It has been observed that even with excellent steroidal suppression of local articular symptoms as well as constitutional manifestations, radiographic evidence of increasing joint damage will appear on films taken at intervals.[4] However, suppression of active synovitis with concomitant relief of pain and muscle spasm permits a more effective rehabilitation program. Frequently, restoration of degrees of self sufficiency and occupational activity are achieved which would otherwise be impossible.

For patients with early mild rheumatoid arthritis or for those in whom the disease has shown a tendency toward occasional spontaneous remissions, a so-called conservative program of management may be entirely sufficient. Decrease in joint inflammation and prevention of joint deformities generally can be achieved in at least 50 per cent of patients. The incidence of remissions or major improvement has been variously reported as from 48 to 71 per cent of patients treated conservatively.[3,10,12] Features to be emphasized to the patient in a conservative program include: extra rest, avoidance of abuse to involved joints, a well rounded nutritious diet with vitamin supplement, salicylates as required for analgesia, and a physical therapy program including heat, massage and exercise.

The amount of rest must be determined by the severity of joint involvement. In mild cases, routine nocturnal bed rest plus an extra two or three hours daily may suffice. In patients with severe involvement and much constitutional reaction, a period of total bed rest may be required. Abusive activity must be carefully avoided. Prolonged weight-bearing may perpetuate the inflammatory reaction present in a knee or an ankle. Sometimes it may be necessary to alter or change completely a patient's occupational activity. For example, a carpenter by continuing at his trade may make it impossible to control the involvement of a wrist joint.

No proof has ever been presented that any food or group of foods alters the course of rheumatoid arthritis. Because some patients do present problems of inadequate food intake, empirically a well balanced diet is recommended. A multiple vitamin supplement also is advised for similar reasons, and *not* because any vitamin lack can cause or any vitamin addition can cure rheumatoid arthritis.

Salicylates remain one of the most important drugs in any treatment program. In addition to excellent analgesic effect, aspirin appears to have some suppressive action on the synovitis, although by what means is unknown. The drug should be given to tolerance; 0.6 to 0.9 gm. (10 to 15 grains) four times a day is the suggested minimum. Administration with meals or the use of enteric coated or buffered tablets generally will minimize gastric distress. Mild toxicity may be manifest by tinnitus or diminished auditory acuity. With the latter, the dosage should be reduced to prevent possible permanent deafness. With severe toxicity, reduction of prothrombin activity may result in bleeding tendencies, necessitating immediate lowering of dosage. Acute toxicity of severe salicylism may be manifest by mental confusion, drowsiness and hyperpnea. These symptoms demand immediate discontinuance of the drug.

The value of physical therapy cannot be overemphasized in any treatment program for patients with rheumatoid arthritis. Adequate treatment and careful instruction in a home program to be followed by the patient should be provided by the physiatrist, but it remains the responsibility of the supervising clinician to see that the patient faithfully follows the program. Modifications and new techniques should be introduced as needed.[9] Too often this portion of the patient's program is neglected or omitted altogether. Hill and Holbrook[6] estimated that not one patient in a hundred follows a proper schedule to protect his joints and maintain function.

Large numbers of rheumatoid patients have been treated with Butazolidin® with varying degrees of success. Fear of toxicity[8] has limited my experience with this compound. Frequency and severity of side effects have apparently diminished significantly since the dose given for maintenance has been reduced to 400 mg. or less daily.

Because of ease of administration, antimalarial preparations may be used in milder cases of rheumatoid disease. These may be given a ten or twelve week trial, using either chloroquine or hydroxychloroquine, known commercially as Aralan® or Plaquenil®. The average dose of Aralan® is 250 mg. a day and of Plaquenil® 200 mg. a day. These doses are given in single tablets, preferably after the evening meal.

Side effects, which occur in about 25 per cent of patients, consist principally of gastrointestinal distress such as nausea, cramps or diarrhea, skin rashes, headache or blurred vision. If such symptoms occur, the dose may be temporarily reduced or omitted. Administration of the drugs may sometimes be resumed without recurrence of the undesirable effects after the symptoms of toxicity have cleared.

Because leukopenia and anemia have been reported in rare instances, it is wise to have a complete blood cell count done soon after the beginning of treatment and then at intervals of a few weeks in the next several months. In my experience, the incidence of good response to the chloroquine group of drugs has not been as high as that reported by other investigators; I have noted favorable results in only 30 to 40 per cent of patients.

If the patient's status is not sufficiently improved after a reasonable trial period with a conservative program, the addition of an oral steroid may be indicated. Steroids should not be used as a substitute for a conservative regimen but rather should serve as an addition to it in properly selected cases. Careful history-taking and physical examination are mandatory for every candidate for steroid therapy. Important contraindications to use of steroids include active, latent or questionably healed tuberculosis, peptic ulcer, history of psychotic episodes, significant azotemia or renal insufficiency, ocular herpes, acute disseminate bacterial infections or acute thrombophlebitis. With the newer steroids with less mineralocorticoid activity, hypertension and congestive cardiac failure are less strongly contraindicative. Diabetic patients receiving dexamethasone in dosages up to 3.0 mg. daily have had generally only modest increases in insulin requirements.[7]

Clinical experience with the newer steroids has been amassed rapidly and several hundred scientific papers dealing with the use of them have already appeared. With all steroids proven to have significant anti-arthritic activity, certain substituents on

the cycloperhydrophenanthrene nucleus are essential: An oxygen atom at the 3 position, a double bond between carbon atoms 4 and 5, an oxygen atom or hydroxyl group on C11, an hydroxyl group at C17 and a ketone group on C20. Considerable alteration in effects on salt and water metabolism can be produced by the placement of additional substituents, notably a halogen at the 9 alpha position. Much of this effect can be negated by the addition of an hydroxyl group at the 16th carbon position (triamcinolone) or a methyl group at this position (dexamethasone). At the same time a significant portion of the enhanced anti-inflammatory effect is retained.

Dosages of the following steroids are considered to be equipotent respectively in their anti-inflammatory effects: cortisone 30 mg., hydrocortisone 25 mg., prednisone or prednisolone 5 mg., methyl prednisolone or triamcinolone 4 mg., and dexamethasone 0.75 mg. Very little basic work has been done to explain how these compounds bring about an anti-inflammatory or antirheumatic effect. As a matter of fact, no explanation is forthcoming regarding the reasons for potentiation produced by substituents added at various positions. Whether augmentation is produced by intrinsic effects related to the added atom or radical or whether structural additions simply interfere with the degradation of the compound or the formation of its conjugates by the liver, remains unknown.

Orally administered steroids should be given in divided doses, preferably after meals and at bedtime. There is little justification for adhering to a strict six-hour schedule, for apart from interfering with the patient's rest, it entails greater risk of peptic ulceration. Boland and Headley[2] reported on the value of preparations combining steroids with antacids.

Aside from peptic ulcer, other undesirable side effects of long continued use of steroids include facial rounding and hypertrichosis, cervicodorsal hump, mental stimulation, insomnia, acne, weakness and fatigue. These difficulties generally clear readily as the dosage of the drug is reduced or eliminated. More serious side effects include peptic ulcer, fractures, mental changes, periarteritis nodosa and overwhelming intercurrent infection. Hazards of long-term prednisone therapy increase alarmingly when the daily dosage exceeds 15 mg.[1] A safe long-term schedule of treatment probably should not exceed 10 mg. of prednisone daily (or comparable amounts of the other steroids) and lesser dosages should be used for adolescents and postmenopausal women.

If contraindications to the use of steroids exist or if response is not satisfactory, chrysotherapy should be considered. Although its use is empirical, gold may have a suppressive effect upon rheumatoid activity. It is a mistake to postpone the use of gold salts until major destruction of a joint has occurred and then to employ it as a last resort. Gold cannot restore damaged cartilage or bone, nor can it produce any favorable effects on inactive rheumatoid arthritis.[5] Gold may check further progress only in active disease, and the clinician should make it clear to the patient that previous destructive changes are irreversible. The patient should be apprised also of the potential toxicity of this compound and the need for careful supervision throughout the period of its administration. The patient should also be aware of the fact that favorable results are obtained only in about two-thirds of persons treated. Previous serious toxicity to gold and acute lupus erythematosus are contraindications to its use. Serious liver or renal damage and blood dyscrasias render gold therapy more hazardous than it might otherwise be.

Mild toxic reactions to gold may be observed in about 40 per cent of patients. More serious reactions are observed in somewhat less than 5 per cent. Before each injection, the patient should be questioned or examined for symptoms or signs of stomatitis, gastritis, colitis or dermatitis. Other possible toxic manifestations include nephritis, hepatitis, blood or bone marrow disturbances, including anemia, leukopenia, agranulocytosis or thrombocytopenia. Regular examination of blood and urine is mandatory.

Toxic reactions generally are well controlled with the use of BAL (British anti-Lewisite) or steroids. Furthermore, in some cases gold therapy may be continued despite a skin rash, cramps or diarrhea if these symptoms subside after careful adjustment of the dosage.

A schedule I have found useful, using a soluble gold salt, is to commence with a dose of 10 mg. and then give it twice weekly in gradually increasing amounts until the total dose at each injection is 50 mg. This amount then may be administered at weekly intervals until optimal response has been obtained; usually this will require from 600 to 1,200 mg. Thereafter the interval between doses may be cautiously lengthened to two, three or four weeks, the weekly schedule being resumed if an exacerbation occurs. If a monthly maintenance dose adequately suppresses recurrences, it may be continued for a year or longer until all joint disease appears to be suppressed. Too rapid discontinuance of gold nearly always results in an exacerbation of the arthritis.

It is apparent that no ideal treatment exists for this chronic and unpredictable disease. Much has been done but much more remains to be done, particularly in the investigation of possible modes of action of the steroid group of drugs.

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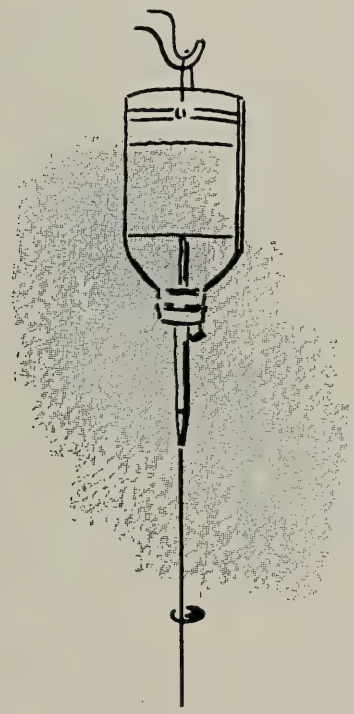
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Rheumatoid Arthritis

Present-Day Physical Therapy

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• **Physical therapy is an important therapeutic agent for patients with rheumatoid arthritis. Well directed exercise balanced with rest is fundamental. Careful muscular reeducation is as important in the treatment of patients with arthritis as it is in caring for a patient with paralysis. Pain with slight malalignment and limitation in the joint will cause muscles to lose their sequence of action and so upset the rhythm of motion.**

Active exercise with a balanced use of assistance and resistance to movement, combined, as indicated, with traction upon the joint or stretching of constricted tissues may result in (1) stabilization of the joint, (2) increase in range of movement, (3) relaxation of antagonists, and (4) reduction of atrophy. The objectives of muscular exercise then are (1) reduction of pain, spasm and deformity, (2) development of muscular power, and (3) restoration of the normal rhythm of movement.

IT IS GENERALLY STATED that some 25 per cent of patients with rheumatoid arthritis get well or recover sufficiently with minimal care; that 10 per cent have what may be called a malignant form of arthritis, become very ill, have pronounced destruction of joints, and fail to respond to any treatment. Between these two groups are some 65 per cent of patients who require close supervision. For them, satisfactory therapeutic planning should result in adequate rehabilitation.

It is well to keep in mind that rheumatoid arthritis is a generalized disease with involvement of joints a conspicuous feature, that the cause is unknown, that the course is long, that the duration of the active process cannot be estimated, but that this process does come to an end eventually. In such circumstances the treatment must be planned on a long-time basis, and this is something that the patient must understand. The confidence of the patient must be gained at the outset. The patient is often depressed because of the pain and limitation of performance which excludes him from his ordinary association with his family and from his routine social activities. This means that the family must understand the situation sufficiently to provide the necessary kindness balanced with toughness which will render the best support in the home. Treatment must be continuous, simple and practical. It consists of rest, both mental and physical, necessary analgesics, physical therapy and, at times, splinting. Many patients require certain more or less specific drugs, such as the steroids or gold. Manipulative or surgical treatment may be required if deformities are permitted to develop.

Physical therapy is recognized as having a most important place in the treatment of arthritis. The musculoskeletal system should receive attention from the time the patient first presents himself for care, whether this be at the onset of the disease or at any stage in its development. The aim is to relieve pain, to combat atrophy, to retain normal mobility, to prevent or reduce deformity, and so to rehabilitate the patient to the limits of possibility. The physical therapeutic modalities used are heat, massage and exercise, but there is considerable variation in the manner in which these are applied. Careful consideration must be given to the state of the patient and to selection of the treatment that will result in the best response. Numerous articles have been written to show that physical therapy can be carried on in the home. Various forms of heat are prescribed and programs of exercise are outlined and taught the patient in a relatively brief time, either in the hospital or in the clinic. Fortunately, a few investigators have discussed the advantages of long-time care in institutions. Wyman[16] mentioned the spas of Europe and the better mental and physical rest that can be obtained in a hospital equipped to take care of chronic disease than in the home. Emotional shock, worry and anxiety are better controlled. Better arrangements can be made for the severely crippled patient who must start walking. Duthie[6] wrote: "All are agreed on the importance of local and general rest during the active phases of the disease, the prevention and correction of deformity by splints, and the restoration of function by physiotherapy and graduated exercises. However, the application of these measures is rendered exceedingly difficult in practice by lack of accommodation in hospital, adverse social and economic circumstances in individual patients and, perhaps more important, a dearth of physicians with adequate training and ex-

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perience prepared to devote a substantial proportion of their time and energies to the study and care of these patients."

Duthie described a study made in Great Britain, in which over three hundred patients were observed. Treatment consisted of bed rest in hospital an average of nine plus weeks, good positioning, maintenance exercises, correct handling and treatment of joints, such drugs as aspirin, codeine and iron, at times transfusions, and balanced diet. When maximum improvement had been attained, the patient was sent home on a well planned regime. Of 307 patients, 281 were followed, 100 of them showing an advance of one grade in functional capacity and 70 an advance of two or more grades. Treatment in hospital also had a significant effect in reducing the activity of the disease, which was assessed by the sedimentation rate, hemoglobin level and objective signs of inflammation in the joints.

There are economic and social barriers and we know that it is impossible to keep large numbers of arthritic patients long in hospital. We do not have the proper facilities, nor can the patient afford such service. Since physical therapy is very important, patients cannot be left to their own devices in carrying out programs in the home. Well supervised physical therapy is a necessity. It must be carried on in the clinic or office while adequate arrangement for rest and proper activity in the home is planned and a member of the family is being trained to assist with the physical therapeutic measures. This means a compromise but it does not underrate the need for satisfactory treatment individually planned.

The rationale for physical therapy must depend first upon an understanding of the pathologic delineations of the disease as a whole, and secondarily upon anatomic and physiologic knowledge of the function of involved joints and tissues.[1]

Heat

Heat causes a definite increase in circulation due to vasodilatation, and it reduces pain by counterirritation. These are both reflex effects of the heat acting upon the nerve endings in the subcutaneous tissue, reflex vasodilatation and cutaneovisceral reflexes. Relaxation of spastic muscles may occur secondarily. It is believed that a rise of temperature within muscles accelerates the chemical processes of the cell fiber, thus affecting the viscous and elastic properties of the contractual tissue to increase the amount of work without changing the energy required. Cold, of course, causes vasoconstriction but as the constriction is immediately followed by vasodilatation the final response is little different from that to be expected from elevating the temperature of the tissues. For the most part, elevation of the temperature either locally or generally gives greater comfort.

Massage

Massage has a limited value in the treatment of arthritis. It can assist in moving the increased fluids following vasodilatation. Light stroking acts upon the sensory nerve-endings to reduce pain. It can be used directly over joints. Deep stroking and kneading to muscles releases tension and improves circulation. Massage in no way replaces exercise since it cannot produce any of the metabolic changes produced by contracting muscles.

Exercise

Exercise, when used correctly, is by far the most important agent in the treatment of arthritis. Passive exercise or so-called relaxed movement has no real place in this program. Active exercise, on the other hand, has definite and important physiological effects on skeletal muscle. It stimulates circulation, maintains or increases flexibility and reduces atrophy. Furthermore, exercise promotes a sense of generalized well-being which is probably the result of not only direct action by the muscles but indirect action of physiological bodily responses. These responses are in reasonable proportion to the amount of work done. Work may be minimal when pain is severe and assistance is required to move the joint; but work may be increased by applying gradually increasing resistance to the movement. Active exercise with a balanced use of assistance and resistance to movement combined with traction upon the joint or stretching of the soft tissues as indicated may result in (1) stabilization of the joint, (2) increase in range of movement, (3) relaxation of antagonists, (4) reduction of atrophy. Thus, the objectives of muscular exercise are to reduce pain, spasm and deformity, to increase muscular power and to restore normal rhythm of movement.

Careful muscular reeducation is as important in the treatment of patients with arthritis as it is when caring for a patient with paralysis. It often becomes more difficult, for pain and even slight malalignment and tightness in the joints will cause muscles to lose their proper sequence of action and upset the rhythm of movement. Manual assistance rather than mechanical equipment should be employed. A properly instructed therapist can train, guide, assist, resist, exert traction and stretch, thus directing joints into line and muscles into rhythmic action. Mechanical apparatus must be used with caution until the patient is trained and fair power is developed. However, as arthritis becomes quiescent, general exercise with and without apparatus can increase muscular power and hence endurance, lead to a feeling of well-being, and possibly return patients to useful work in spite of the handicap of deformed and severely damaged joints.

A patient who is very ill with acute rheumatoid

arthritis (as indicated by pronounced synovitis, elevated temperature, severe pain and spasm of muscles) requires bed rest. Acutely painful joints must be splinted. Some observers believe that the splints must be fixed and non-removable. Preston[13] and Kuhns[11] recommended that the splints be worn constantly when motion is very painful, and later only at night, that they be discarded when inflammation subsides, that only after the acute inflammation is subsiding should exercise of the part and use in the activities of daily living be instituted in order to preserve function. Preston said that "fixed contractures, intraarticular scars or erosions of articular surfaces do not usually develop in joints during the acute or subacute stages of the disease so that normal musculoskeletal function may be restored in most instances by corrective exercises after the acute inflammatory pathology subsides and the joint can be moved without pain." It has been observed that when this situation presents itself, a carefully made plaster splint which can be removed to permit the use of either ice packs or moist heat followed by very gentle manual traction and assisted resisted motion within the limits of pain, will consistently reduce the amount of muscular spasm and will make the care of the joint much more simple than is possible when it is placed in a nonremovable splint. When casts have been in place for two or three weeks, motion is difficult to obtain and the fear of the patient is greatly increased.

Routinely we see what can be classed as the subacute or chronic condition where limitation of motion exists and where deformities may be present in various stages. Every joint in the body must be examined and adequately treated. The entire spine[8] must be kept mobilized and posture maintained. The rib cage must, if at all possible, continue to move upon the spine at the costovertebral junctions to preserve good intrathoracic space and function. Care of certain joints can be considered in more detail.

The Hand

In spite of the fact that the hands are of greatest importance in the economic world, and that every individual depends upon his hands for independence, they have not received the attention that we would like to see in the treatment of arthritis. Fortunately, interest has been increasing. The hand[5] is used in "gripping," "pinching," and "tapping." All of these functions require flexion at the metacarpophalangeal joints with varying amounts of flexion at the interphalangeal joints. Pinching, of course, requires flexion of the metacarpophalangeal joints with extension of the interphalangeal joints and approximation of thumb to fingertips. Since the normal position of the relaxed hand is one of flexion with moderate ulnar deviation at the metacarpophalangeal joints, it is not uncommon to find this position becoming fixed, with secondary hyperextension at the proximal interphalangeal joints and flexion at the distal interphalangeal joints. Contracture of soft tissues, including the intrinsic muscles, is bound to occur and deformity results. At this point the wrist may tend to palmar flexion due to overactivity of the long flexors. The wrist must keep moderate dorsiflexion to permit a strong grasp.

The aponeurosis of the metacarpophalangeal joint with its control by the extensor digitorum communis is of vital importance in maintaining the function of the hand. In the hand in particular, joints often are hyperflexible due to changes in the fibrous tissue. Frequently this is an early sign of arthritic disease. Severe synovitis with the increased synovial fluid can so stretch the capsule with its ligaments that the joint loses stability and subluxation results. The program of exercise for the hand is planned with regard to the aponeurosis and the rhythmic action of the muscles. Complete extension of the metacarpophalangeal joints is the starting position for all the fundamental movements of the digits. Complete extension of the first joint must be obtained so that the dorsal aponeurosis is drawn proximally before the intrinsic muscles can, through their attachment to it, extend interphalangeal joints correctly. Full extension of this first joint is necessary to permit the proper direction of pull on the aponeurosis and the first phalanx by the intrinsic muscles to bring about lateral motion of the digits. The long flexors require extension of the first joint to obtain full flexion of the interphalangeal joints before the aponeurosis is relaxed and the intrinsic muscles pull the metacarpophalangeal joint into flexion to permit a firm grasp. Bunnell[4] said that all intrinsic muscles act in the flexion of the metacarpophalangeal joints. Perry[12] noted that electromyographic studies revealed no action of the interosseus when the metacarpophalangeal joints are flexed. This movement is entirely due to the lumbricales. Further study of this point would seem necessary. However, it does not change the rhythm of functional movement, which is: extend the first joint, then the second and third; flex the second and third, and then flex the first.

Training in this rhythm of movement can prevent deformity before it has had time to occur. If the fixation has not become static, improvement of range can be gained by stretching the shortened soft tissues to permit realignment of joints. If the deformity is pronounced and the tendons of the extensor digitorum communis have swung lateralward across the metacarpal heads, correction cannot be obtained by this kind of stretching, but power is improved by it and pain therefore relieved to such

an extent as to make the hand much more useful. At the same time abduction and opposition of the thumb must be obtained or preserved.

The Wrist

Tenosynovitis of the long flexors as they cross the wrist can limit both extension and flexion of the fingers. Full active or passive extension of the wrist and fingers can prevent this development. A syndrome of particular importance is that of spontaneous rupture of the long extensor tendons of the wrist.[7] Destruction of the radioulnar articular disc with consequent subluxation of the ulna predisposes to this lesion. It is believed that the subluxated ulna impinges upon the tendons and compression is increased by the tension of the dorsal carpal ligament. Physical therapy used to increase the range of function may play a part in causing this condition. Since it is important to maintain motion, prophylactic excision of the ulnar styloid may be indicated in appropriate cases. Such a measure would not only avoid rupture of extensor tendons, but would greatly improve pronation and supination. It is important to note subluxation of the ulna and to try to protect the tendons against rupture.

The Knee

In the lower or weight-bearing extremity, perhaps the knee is the key joint. The hips are involved less frequently. Flexor contractures of the hip are secondary to those of the knee. Prevention of contractures at the knee is most important. Sufficient rest, proper splinting, simple manual traction or stretching with assisted and resisted motion, particularly for extension, should protect the knee. Extension is most easily and painlessly obtained when the patient is lying supine with the hip in extension at the edge of the table. The quadriceps femoris is working at its best advantage since it is, in part, a two-joint muscle and resistance to extension can be applied most satisfactorily. When traction is required, the knee can be flexed and the pull placed just distal to the knee, against the tibia, in an attempt to transfer the tibia distally before attempting to extend it upon the femur. Where contractures have occurred, manipulation under anesthesia is frequently of value. Often the adhesions give easily and extension can be obtained without great force. If it cannot be obtained by this means, then operation is indicated rather than use of a wedged cast.[14] Wedging is slow and often painful, which often discourages the patient. Also, unless the progress of wedging is watched very carefully, the hamstrings may cause subluxation of the tibia upon the femur.

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Lobar Pneumonia

The Distribution of Sites in Infants and Children

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• **In a review of roentgenograms of 228 pediatric patients with segmental pneumonia, the left upper lobe was observed to be involved in only 4 per cent of cases. The right upper lobe was involved most frequently—over eight times as often as the left upper lobe and twice as often as the right middle or lower lobe. It is suggested that this distribution is related to the fact that the angle of the left bronchus in relation to the median plane is more acute than the angle of the right bronchus, the sharper angle perhaps serving as protection against aspiration.**

FOR MANY YEARS certain facts regarding the distribution of segmental and "lobar" pneumonia in infants and children have been recognized—(1) that involvement of the right upper lobe predominates, and (2) that localized inflammatory disease on the left is largely confined to the lower lobe. It was the purpose of this investigation to ascertain if these facts still hold, and to attempt to establish the reason for this distribution.

Segmental pneumonia as referred to in this discussion is limited to homogeneous infiltration of one of the bronchopulmonary segments, according to the Jackson-Huber classification. Involvement of all the segments of one lobe was infrequently demonstrated. Interstitial pneumonia and bronchopneumonia are excluded.

From San Francisco General Hospital, San Francisco 10.
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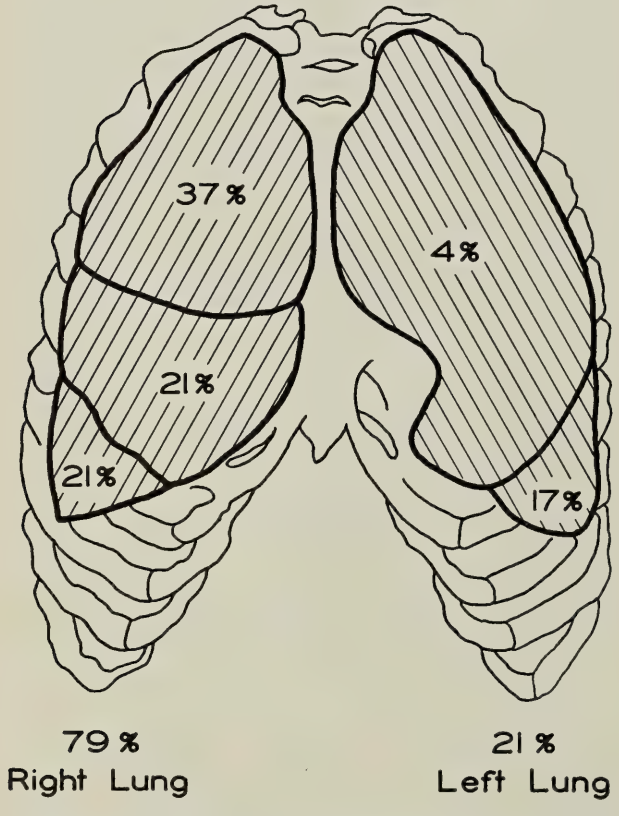


Figure 1.—Distribution of pneumonia in 228 infants and children observed at San Francisco General Hospital in a five-year period.

The material was gathered by reviewing roentgen studies of 285 patients cross-indexed as having segmental pneumonia from the records of the University of California and Stanford University pediatric services at the San Francisco General Hospital for the period 1952-1957. Two hundred and twenty-eight cases were selected as having fulfilled the criteria for this study.

In agreement with previous observation, the data in the present series (Table 1 and Figure 1) showed a preponderance of right lung involvement—79 per cent against 21 per cent. It was also observed that segmental pneumonic disease occurred in the right upper lobe eight times as often as in the left upper lobe.

On the right, nearly half of segmental pneumonic involvement was located in the upper lobe and about one-fourth each in the middle and lower.

Although the left upper lobe was involved in ten cases, if the lingula is considered the middle lobe

TABLE 1.—*Lobar Distribution of Pneumonia in Infants and Children Through Age 14, University of California and Stanford Pediatric Services, San Francisco General Hospital, 1952-1957*

Site Involved	No. of Patients	Per Cent of Series	
Right upper lobe	85	37	79 per cent right lung
Right middle lobe	47	21	
Right lower lobe	47	21	
Left upper lobe	10	4	21 per cent left lung
Left lower lobe	39	17	
	228	100	

counterpart of the left lung, there were only four cases of true left upper lobe involvement, or an incidence of less than 2 per cent. Neither the anterior segment of the left upper lobe nor the apical portion of the apical-posterior segment of the left upper lobe was involved. Nine of the ten cases of upper left lobe involvement occurred in Negro or Latin-American patients, but this is not considered of clinical significance, since most of the pediatric patients at San Francisco General Hospital fall in this category.

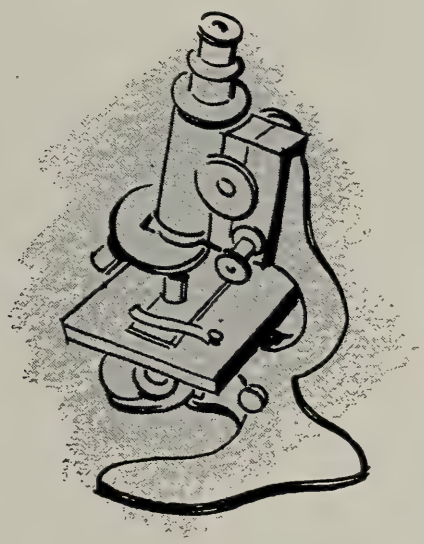
DISCUSSION

At birth, the bifurcation of the trachea lies at the level of the third thoracic vertebra, then gradually descends to the level of the fifth vertebral body at age ten and there remains until old age, when it may go still lower (sixth thoracic body). It is thought that the increase in the angle of the upper lobe bronchi with the saggital plane produced by the descent of the bifurcation provides a protective mechanism against upper lobe pneumonia in adults, since it lessens the possibility of aspiration to these segments. The larger diameter and more vertical direction of the right main bronchus are probably other factors accounting for the greater frequency of right lung pneumonia.

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The Psychodynamics of Hypertension

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• **Psychotherapeutic study of patients with essential hypertension shows evidence of massive repression of unacceptable feelings in many areas of the personality, predominantly feelings of rage and hostility. It appears that in the mentation of the hypertensive person, rage not only risks the loss of affection and approval by others, but is unconsciously equated by him with murderous loss of self-control. In addition, he characteristically has an inordinate fear of death.**

Intensive insight psychotherapy, when commenced early in a well-motivated patient, is very effective in the treatment of this disorder. As in any psychosomatic condition, the patient should be concomitantly treated by his general physician or by an internist.

WE ARE ALL familiar with the expressions, "Watch your blood pressure"; "Don't get your blood pressure up"; "Don't burst a blood vessel," applied to persons who are in the process of becoming angry or enraged; or again, "apoplectic with rage"; "flushed with anger"; "the veins stood out on his neck like cords." The import of all of these idiomatic expressions of folk knowledge is that rage, especially suppressed rage, has something to do with an increased blood pressure. And the composite of the psychic structure of the hypertensive patient, as obtained from psychotherapeutic scrutiny, amply seconds and supports this folk view.

The typical patient, with essential hypertension, as delineated by psychotherapeutic study, shows an external friendliness, blandiloquence and excellent self-control, beneath which there are powerful feelings of hostility, rage and anxiety. Latent repressed hostility is found in every neurosis, but the difference as noted in hypertension is that the emotions of rage are exceedingly intense, chronic, inhibited, repressed, not expressed in motility or adequately bound in any organized neurosis. The patients also are generally not able to satisfy passive dependent wishes or gratify hostile ones, and hence remain blocked in both directions. They have a "double bind" conflict here—they are "damned if they do, and damned if they don't."

Why does the person with hypertension have more of a problem in handling his rage than most of us? There is a variety of evidence suggesting that the repression of hostility is so massive because the patient's early experience of hostile rage, manifested either in thought or deed, became equated with murderous loss of self-control. From dreams and other sources we know that in unconscious mentation a thought is equated with the deed and is equally culpable with it. Hence the patient feels the same anxiety and guilt over fantasied acts of aggression as he might experience with completed ones. This basic unconscious pattern, which is learned very early, is transferred and perpetuated in all later competitive striving, such as in work, the achievement of social position, prestige, etc., so that success in these activities is also equated with murderous annihilation. Paradoxically, as success mounts, the individual has to work all the harder to keep rein on his hostile aggressive impulses and the guilt and terror attendant thereupon.

But important as the repression of hostility is in the genesis and progression of this illness, there is no convincing evidence that this factor is uniquely specific. Hypertension is known to be caused by fear, anger, sexual excitement, and sustained exertion and striving. If conscious, these states are appropriate and self-limiting, but if unconsciously repressed they are perpetual and enduring. Clinically, all these factors may be encountered in hypertension, singly and in combination, with repression of hostility the dominant though not the exclusive repression.

However, the early background of these patients casts a particular light on the genesis of these circular and mutual reinforcing neurotic mechanisms. In many such studies there has been found, as an outstanding feature of the antecedent environment, a profound sense of early insecurity in relation to primary familial figures. Death of a parent or separation from one occurred as a prevenient factor in over half of one such group.[1] In 23 of a group of 24 patients studied in the same group, serious hypertension was first observed after such emotional disturbance as severe illness of a relative, injury, illness or other trauma to the patient, changes in the patient's life, such as separation, divorce, illness of a child, loss of a job, or loss of savings—circumstances which recapitulated an earlier and unresolved traumatic conflict. In 13 of 24 the emotional disturb-

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ances seemed to be mainly a reaction to serious illness or death of a close relative.

In the author's experience these patients also characteristically show, both consciously and unconsciously, an inordinate fear of death; and from dream and other evidence it seems clear that they feel that their death must follow as a consequence of antecedent death wishes toward their ambivalently regarded love objects. The history of incipient essential hypertension is closely related and similar to that of early psychoneurosis: headache, dizziness, tinnitus, excessive fatigue, and mood changes are prominently described and are often out of proportion to the extent of physical disease that is present.

The role which intrapsychic factors play in the genesis of hypertension was further elucidated by Schulz and Schwab,[3] who found the incidence of hypertension in the American southern Negro to be two and one-half times that in whites. Kesilman,[2] in a survey conducted in a northern prison, found hypertension three times as common among Negroes as among whites; and since the African Negro is, of all peoples, the most free from this disease, it would appear that the singular pressures of life for the Negro in our culture have a relationship to this high incidence. The author has heard from a physician recently returned from Johannesburg that the clinics there in which urban Negroes are treated encounter a very high incidence of malignant hypertension, a disease unknown in the tribal populations.

The exact physiological mechanisms are not known whereby a persistent and unalleviated state of tension, stress and repressed rage produces the organic changes which may later become irreversible in hypertension. Wolf[4] and co-workers have reported evidence of renal vasoconstriction and ischemia in response to experimentally produced psychological stress: When conflictful and unpleasant matters were introduced into conversation with their subjects, the renal blood flow was reduced by as much as 25 per cent from the control level. It would be most interesting to know whether this process is intermittent or continuous in these patients and whether it causes the renal pressure phenomena which are now being so extensively studied.

As for psychotherapeutic measures, it is easy to see that if the rage and anxiety that are so conspicuously repressed are due to unconscious reasons, then counseling, support, reassurance, exhortation and advice to the patient to express his hostility more openly will be futile—and so it proves to be. No hypertensive patient was ever cured by being advised to beat his wife or talk back to the boss.

The consistent experience of the author and of other investigators is that intensive insight psychotherapy, if begun before irreversible organic change has taken place, with a motivated patient and by a psychiatrist adequately trained and experienced in this work, is almost always successful in alleviating or vastly modifying the illness. Since this process may involve anywhere from 50 to 350 hours of work, obviously no psychiatrist has a large series, but the general experience is that successfully treated patients remain normotensive, feel generally better and cope more successfully with a wide variety of life stresses, since the goal of successful psychotherapy is to resolve not only the presenting complaints but any concomitant neurotic difficulties.

It is important, however, that the patient be referred for psychotherapy early, before irreversible damage has occurred, and that the referring physician work conjointly with the psychiatrist in the medical management of the patient. This is the custom in psychiatry for two reasons: first, because the well-trained psychiatrist by the time his training is finished, is usually a decade away from his own intensive medical training and not generally competent to supply the quality of medical care which his colleagues can; second, because it is technically difficult to function at once as both psychotherapist and internist.

This whole area of the joint study and treatment of psychosomatic disorders such as hypertension has only begun to be explored. No greater opportunities exist for an expansion of the frontiers of medical understanding.

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The Use of the Abbott-Rawson Tube

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• **The Abbott-Rawson tube is a useful device in gastrointestinal surgery, as it obviates intravenous and intramuscular therapy. Jejunal rather than intravenous feedings may be used and the tube may also be used for administration of potassium, antibiotics and vitamins.**

ALTHOUGH MANY USES beyond that for which it was first employed have been developed for the Abbott-Rawson tube, it remains a much neglected surgical adjunct. For a time after it was described in 1937, the device was widely used for the emptying of the gastrointestinal tract at times of surgical stress. Now it is described in only one textbook on surgery.[1] Yet there are a number of collateral advantages—in nutrition and in administration of drugs, fluids and electrolytes—to having the tube in place. Among them is the prompt jejunal feeding of debilitated patients after operation. Nutrition with carbohydrates, proteins and fats impossible to administer intravenously, can be carried out. Potassium deficiencies are easier to deal with. The danger of overloading the circulatory system with fluids, which is a hazard to be reckoned with particularly in older patients when fluids are infused by vein, can be avoided. A further use of the tube is for introduction of antibiotics and vitamins into the gastrointestinal tract rather than intramuscularly.

The following case is illustrative.

A 41-year-old laborer was admitted to hospital with a history typical of intractable duodenal ulcer of three months' duration. A double-lumen Abbott-Rawson tube was introduced the night before operation. The tube was first passed through the nose and brought out through the mouth. There the metal jejunal bulb was attached to it, and the bulb was swallowed. The stomach was then irrigated with 500 cc. of sterile dilute hydrochloric acid solution. At operation a standard antecolic, isoperistaltic, gastrojejunostomy with subtotal gastrectomy was performed. Before the gastrojejunostomy was completed the distal feeding tube was inserted into the distal jejunal loop.

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After the operation, 100 cc. of 5 per cent glucose in saline solution or water was given every eight hours by slow drip into the tube. Erythromycin and vitamins B and C were added to the fluid. On the fourth day, the tube was removed and the patient was permitted to take liquids by mouth. On the seventh postoperative day he was discharged from the hospital and recovered without complications.

We have used this tube in 28 consecutive cases. The usual criteria are used in determining the length of time the tube remains in place and the amount and kinds of fluid delivered. In four of the patients, additional intravenous therapy was carried out for the first 24 hours postoperatively to overcome pronounced dehydration and electrolytic imbalances. In three cases mucus and blood plugged the tube and a Levine plastic tube had to be inserted to aspirate the material from the stomach. The jejunal feedings, however, were continued. It is believed that once the nurses are trained in the use of the tube, plugging can be prevented. Constant irrigation is necessary. Erosion at the suture line appeared not to be a hazard in the present series, nor could we find a report of such occurrence in the literature.

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Acute Epiglottitis

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• **Although acute epiglottitis is not a rare disease and may be very severe or fatal, it is one not familiar, as it should be, to all physicians dealing with children.**

Diagnosis may be confirmed clinically by direct or indirect examination of the epiglottis. Vaporized cool water is preferable to steam for reducing the swelling of mucosal tissues that impairs breathing.

Chloramphenicol is the drug of choice, as the majority of cases of acute epiglottitis are due to H. Influenzae.

Tracheotomy must be carried out if necessary to maintain an airway.

MANY PHYSICIANS are but little aware of acute epiglottitis as a potentially serious and sometimes fatal disease of infants and children. Although the condition was recognized at the turn of the century, only in the last five years has it been included as a distinct entity in pediatric textbooks.[1,2]

Acute epiglottitis is not a rare disease. Miller[7] said that at one hospital about one case a month is observed. Berenberg and Kevy[2] reported on 42 patients with the disease observed in an eight-year period, only one of whom was referred to the hospital with the correct diagnosis. In light of these facts, it behooves physicians who may be called upon to attend children to become better acquainted with this disease and to be prepared to treat it as an emergency.

REPORT OF A CASE

A six-year-old boy was admitted to the U.C.L.A. Medical Center with acute upper respiratory tract obstruction. He had been well until the morning before admission, when he complained of sore throat and anorexia. The body temperature gradually rose. At 2 o'clock in the afternoon the patient was examined by a physician who noted mild pharyngitis and fever and prescribed a tetracycline preparation.

That evening at 8 o'clock difficulty in breathing became apparent and when the physician observed him the patient was sitting up in bed, drooling and having moderate inspiratory stridor. The alae nasae flared, and suprasternal, intercostal and lower sternal retractions were prominent. The epiglottis, easily visualized by depressing the tongue with a tongue blade, was decidedly inflamed and edematous.

Upon arrival at the hospital, the patient was given chloramphenicol intramuscularly and cold steam inhalations were started. When his condition did not improve in two hours, tracheotomy was done. Breathing immediately became easier and by the following morning the patient was afebrile and had no respiratory distress. Chloramphenicol was continued by mouth and the tracheotomy tube was removed after four days. He was discharged on the fifth day. The leukocyte content of the blood at the time of admittance to hospital was 26,900 per cu. mm.—69 per cent neutrophils, 13 per cent banded forms and 15 per cent lymphocytes. No significant organisms grew on cultures of the blood and material from the throat, trachea and epiglottis.

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Etiology

Hemophilus influenza, type B, has been generally considered to be the causative agent in acute epiglottitis. This organism has been the most common one recovered from the throat and from the blood of patients with this disease, although other bacteria have grown on cultures in some instances.

Some investigators[1] believe that this disease, along with most infections of the respiratory tract, is brought about by some precursor disease, most commonly a viral infection, with secondary complications caused by organisms which may be present in the respiratory tract at the time.

Clinical Manifestations

This condition usually affects children between two and six years of age and commonly occurs in the late fall, winter and early spring. Camps[5] reported four cases in infants under one year of age. A very interesting case in a 12-year-old, considered to have bulbar poliomyelitis, was reported by Gundell.[6] Brewer and Rambo[3] have reported cases in adults.

The onset of the disease is abrupt, fever and sore throat being the prominent findings. A younger child may merely gag when drinking. Early in the course of the condition the pharynx is mildly hyperemic and some of the anterior cervical lymph nodes slightly tender. Dyspnea may or may not be

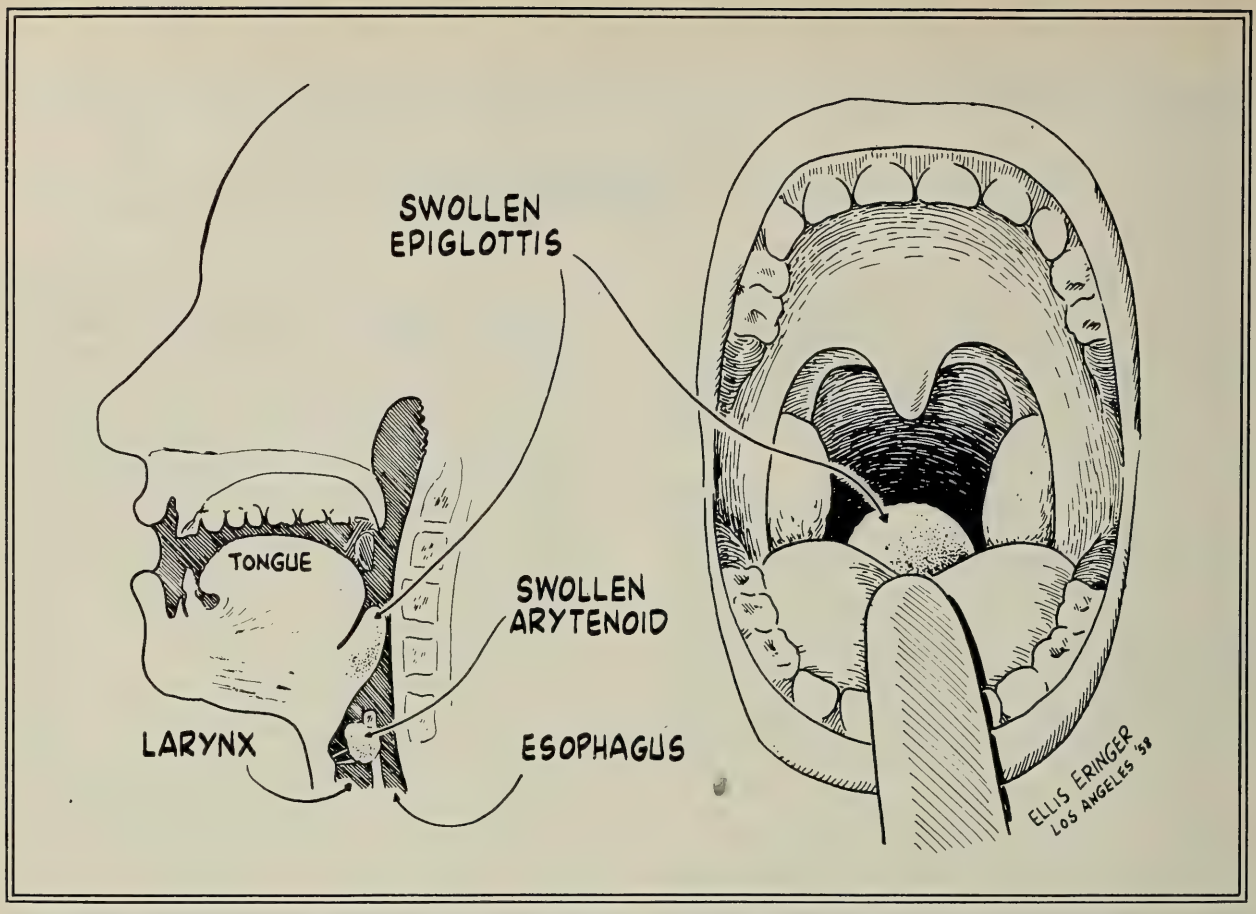


Figure 1.—Showing the swollen arytenoids and epiglottis, and the position of the epiglottis as it appears to view when the tongue is pressed down with a blade.

observed early. Any child with soreness of the throat greater than seems consistent with the visible condition should be considered as possibly having acute epiglottitis.

Pronounced dyspnea, pallor, cyanosis and prostration ensue in a few hours, and by that time there is usually no question about the diagnosis. Inspiratory stridor with pronounced suprasternal and infrasternal retraction occurs. The patient sits up, leans forward, gasps for air with his mouth opened wide and his tongue protruding, and drools excessively. There is a muffled quality to the voice rather than the hoarseness seen with other laryngitides. The pulse and respiration rates are sharply accelerated.

Usually the diagnosis can be confirmed simply by looking at the epiglottis, which can be exposed to view by depressing the tongue or by pulling the tongue forward. In most children, the mere placing of the blade on the tongue will cause the swollen, reddened epiglottis to rise into sight. For an older child, a mirror may be needed for visualization.

From the pathological viewpoint, probably a better name for this disease would be supraglottic laryngitis or supraglottitis. Inflammation and swelling is usually confined to the epiglottis, the aryepiglottis folds and arytenoids. Some superficial ulceration of the mucosa may be present. Cultures of the blood or of material from the epiglottis and pharynx may grow H. Influenzae or other significant organisms.

Differential Diagnosis

Spasmodic croup, one of the diseases to be differentiated from acute epiglottitis, may be preceded by mild upper respiratory tract symptoms or none at all. There may be slight temperature elevation, and typical barking cough is usually present. The epiglottis is not swollen or red as it is in epiglottitis. Spasmodic croup usually responds quickly to increasing the humidity of inspired air.

In acute laryngitis, involvement of the vocal cords is evidenced by definite hoarseness. There may be little dyspnea at the onset. Aphonia should suggest the possibility of diphtheritic laryngitis.

Acute laryngotracheobronchitis is usually slower in onset than acute epiglottitis, symptoms referrable to the respiratory tract usually not developing until after a day or two of illness; and when respiratory difficulty does develop, usually there is expiratory as well as inspiratory impairment, as

against inspiratory only in epiglottitis. Rales may be heard in laryngotracheobronchitis but usually not in epiglottitis.

Treatment

Early establishment of an adequate airway is the primary consideration in dealing with a patient with acute epiglottitis. There are few times in medicine when a disease may require more exacting or immediate treatment. When the respiratory obstruction is not so profound as to require immediate by-passing of the upper respiratory passages, increasing the humidity of inspired air helps reduce the swelling of mucosal tissues, vaporized cold water being superior to steam for this purpose. The apparatus for producing it consists of a nebulizer through which water may be forced by compressed air or oxygen with the nozzle placed close enough to the patient to permit large quantities of the cool vapor to reach respiratory passages.

Chemotherapy should be started at once—chloramphenicol given intramuscularly in dosages of 100 mg. per kilogram of body weight per 24 hours for children up to 15 kg. and 1 to 2 gm. per 24 hours for children over 15 kg. The daily dose is administered in three equal injections at eight-hour intervals. After one day of therapy, the drug may be given orally at a dosage of 50 mg. per kilogram of body weight per 24 hours.

When the patient has pronounced suprasternal and intercostal indrawing, or the pulse is increasing at the rate of ten per hour, or the respiratory rate is increasing, tracheotomy is mandatory. Passing an endotracheal tube is not desirable because of the preexisting inflammatory and edematous condition, except as a preliminary measure until a tracheotomy can be performed. Tracheotomy is preferably performed in the operating room under general anesthesia after an endotracheal tube is passed. Occasionally a temporary laryngeal obstruction may develop in the induction phase, but with the proper equipment at hand the passage of an endotracheal tube is not a major problem.

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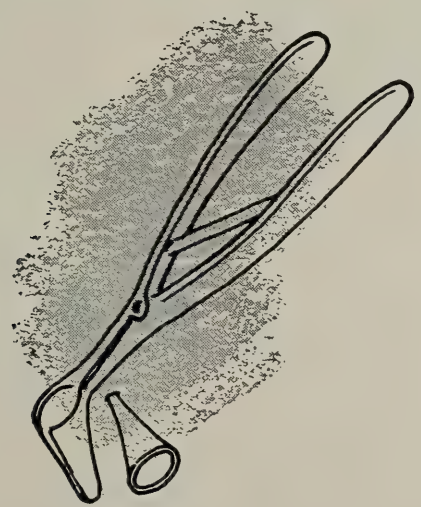
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A Technique for Hernia Repair

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• **After Ryan reported a low recurrence rate in a large series of patients with recurrent inguinal and femoral hernia who were operated upon by a technique developed by Shouldice and later improved, an adaptation of the method was used in a number of difficult cases. In the dissection technique, the transversalis fascia is completely transected from the internal ring to the pubic spine. This exposes a fascial layer which has never before been described as being intentionally used in hernia repair. The method of imbrication with steel wire for suturing also differs from the methods most often used. Use of local anesthesia is another important part of the technique as a whole.**

In 1953 Ryan[7] reported successful repair in 369 cases of recurrent inguinal and femoral hernias, with a recurrence rate of 0.8 per cent; and in 1956[8] he reported repair of indirect sliding inguinal hernia in 313 patients, with a recurrence rate of 1.2 per cent. Compared with other published results, these are outstanding. The technique that was used by Ryan was developed by Shouldice,[9] and it has been improved by him and by others in the past 18 years. Up to the present, hernia repair, mainly inguinal, has been done in more than 30,000 cases. Some 87 per cent of the patients were observed for varying periods—mostly 5 to 10 years—after operation and in them the overall recurrence rate was 0.75 per cent.

After reading the foregoing reports, I carried out repair of hernia in a number of cases, using the method they used. The majority of cases were of a generally difficult order: The patients were obese, or they had had recurrent herniation, or the tissues were poor and the defects large.

The improved and relatively different technique of hernia repair that was used has never been described in the literature. First I would like to emphasize that local anesthesia be used, not only because it is by far the safest and almost without complications, but because it permits repair without tension on tissue, a cardinal precept in surgical operation. As the nerves that are blocked in the operative area are sensory in distribution, the only relaxation is that of a patient lying comfortably on his back. Local anesthesia is particularly desirable in the technique herein described for the stainless steel wire that is used is likely to cut through tissue if pulled too tight. Moreover, the patient can walk about immediately after operation, which gives him confidence in the repair and no reluctance to breathe deeply and cough freely.

The usual groin incision is made down to external oblique fascia. The opening should be adequate for good exposure (Figures 1 and 2) which is particularly important in dealing with obese patients and those with large defects who often have need of repair superior and lateral to the internal ring. The external oblique fascia is incised somewhat more medial than the skin incision in order to make a lateral leaf which is useful in making the subsequent repair. In this procedure meticulous hemostasis and sharp delineation of tissue planes are of utmost importance. Next, the cord is freed and the cremasteric muscle, the blood vessels it contains and the

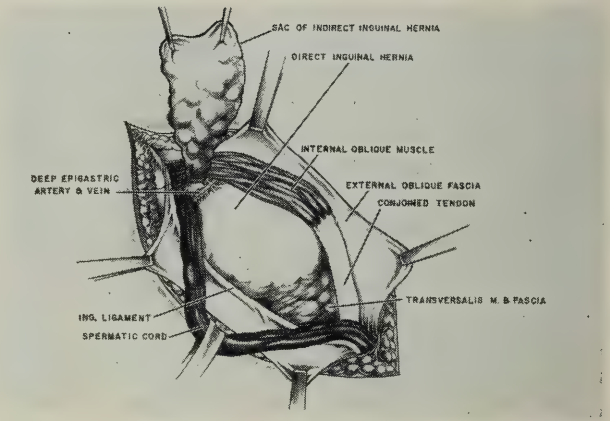


Figure 1.—Groin incision.

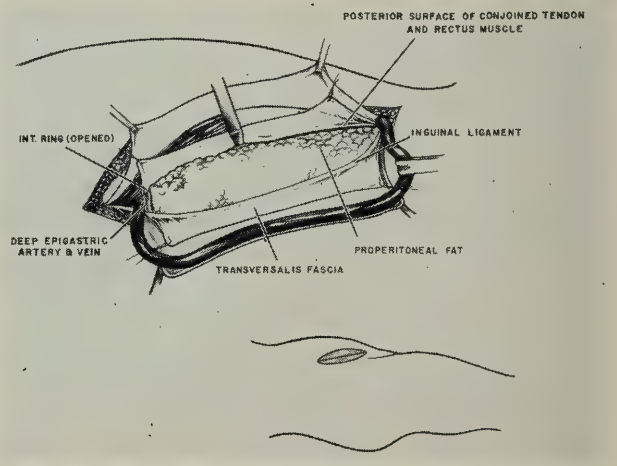


Figure 2.—The transversalis fascia, opened from pubic spine to internal ring.

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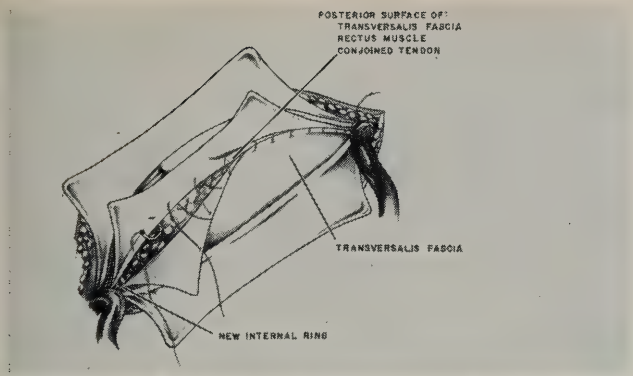


Figure 3.—First layer of stitches forming a new internal ring.

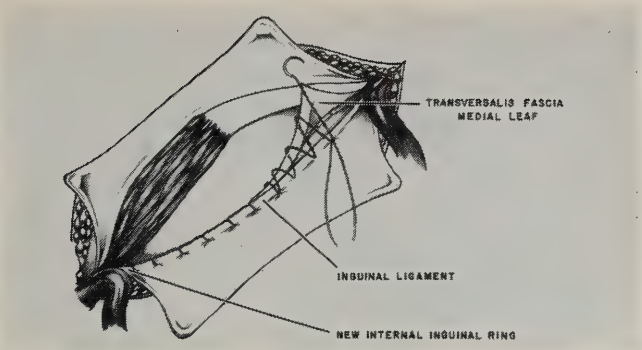


Figure 4.—Poupart's ligament engaged in second layer of stitches.

genital branch of the genitofemoral nerve are excised, along with all fat tabs, leaving a thinned out cord of vas deferens, artery and vein. With this done, if an indirect sac of peritoneum is present it may be dissected easily: The sac is opened, freed completely from transversalis fascia, ligated proximally, and the tied off portion excised. If there is no indirect hernia, peritoneum is always seen; and it is similarly freed from the transversalis fascia and muscle which form the internal ring. The floor of the canal is palpated through the internal ring and if any defect in it is noted it is opened in its entirety down to the pubic spine. At the same time the region lateral to the internal ring is examined by digital palpation and is incised if bulging. This necessitates the formation of a new internal ring. In addition, if the lower portion of the conjoined tendon is attenuated, it too is cut. With good exposure obtained by retraction of tissue, and the ilioinguinal nerve held out of the way in the direction in which it falls, the repair is begun.

A strand of monofilament, No. 34 stainless steel wire 30 inches long, threaded on a No. 5 half circle Mayo needle, is used. The inferior or lateral border of the transversalis fascia, just above the pubic spine, is approximated to the under surface of the conjoined tendon in some cases, and in others to the under surface of the lateral border of the rectus muscle (Figure 3). Choice between these two points of attachment is determined by the anatomic structure and the degree of pathological change in the individual patient. After the first stitch has been tied, a running suture is carried superiorly, the first layer being laid down with stitches 6 to 7 mm. apart until a new internal ring has been formed. This should permit easy entrance of the tip of a large Kelly clamp. The second layer (Figure 4) is continued back without tying, but engaging Poupart's ligament laterally, and transversalis fascia, transversalis muscle and internal oblique muscle medially. Again, depending on the anatomic structure and the nature of pathologic change, approximation of fascia to fascia is always sought first. At no time

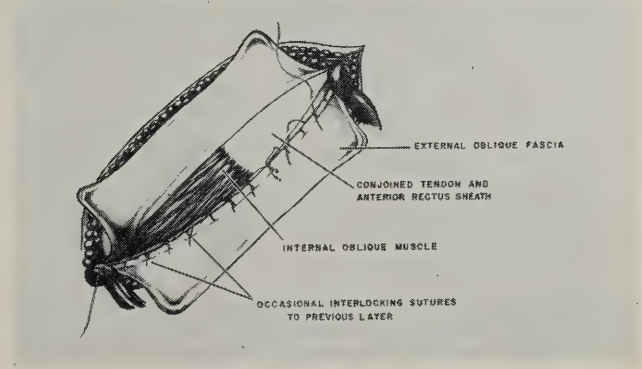


Figure 5.—Placement of third layer of stitches.

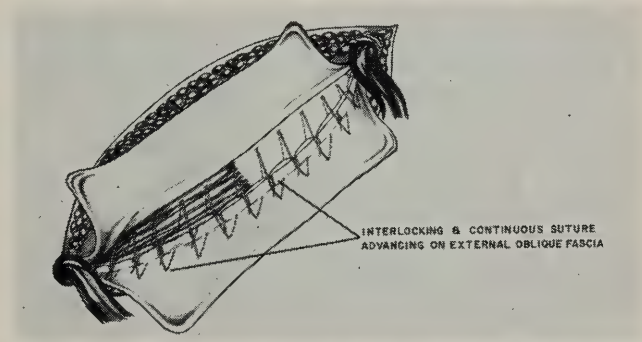


Figure 6.—The third layer is carried down to the pubis, then back for the fourth layer, interlocking with the third.

is tension put on the suture line, an assistant surgeon or a surgical nurse holding the loop of wire extended to prevent kinking. When fascia and periosteum at the pubic spine is reached, it is included and the first and second layers are tied. A third layer (Figure 5) is begun at the internal ring, the suturing advancing laterally along external oblique and medially along internal oblique and/or rectus sheath, the needle at the same time picking up available wire loops of the previous layer to form a partial latticework.[3,5] This third layer is carried down to the pubis and then back in a similar fourth layer (Figure 6), being tied at the internal ring. The cord is then laid on this strong floor of four interlacing wire layers, and the medial leaf of external oblique fascia, which has not been engaged in the lattice, is brought over it, the imbrication being

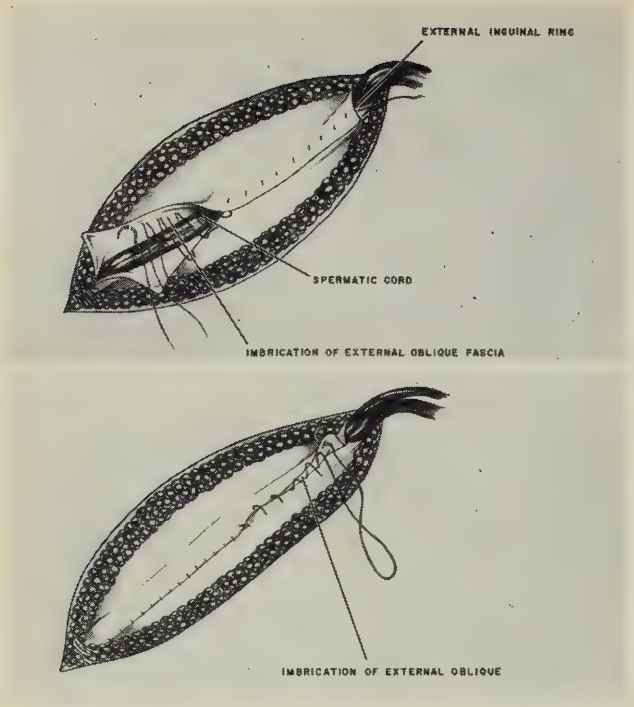


Figure 7.—Two stages of imbrication, showing use of medial leaf of external oblique fascia.

carried out as shown in Figure 7 in two layers of wire. A continuous layer of 3-0 plain catgut is used to approximate Scarpa's fascia, incorporating external oblique fascia to obliterate all dead space; and the skin then is closed in the usual manner with silk or wire.

COMMENT

Since small vessels do not retract to permit formation of clot when infiltration local anesthesia is used, careful hemostasis is necessary. However, the advantages of local anesthesia far outweigh this small burden. Another point to be emphasized is that dissection must be exceedingly clean and that all tissues not contributing to the final repair must be excised. This is particularly true in cases of recurrent hernias where much weak scarring and attenuated muscle is found around the cord. If sharp dissection is carried down to the vas and the vessels that serve it, the scar will be found to fall away and be more readily excisable. This not only thins out the cord but permits good visualization of important tissue planes. Care must be taken not to sacrifice too many spermatic vessels, for, as Halsted[2] pointed out, this leads to edema and atrophy of the testicle.

The major difference in the dissection part of this technique, as compared with most other methods, is the complete transection of transversalis fascia from the internal ring to the pubic spine. Its advantages are that it brings into view a fascial layer which has never been described as being deliberately used in hernia repair. This layer is the under surface of the rectus sheath and/or transversalis fascia and conjoined tendon. There is usually a firm fascial border which can be used nicely in forming the first and second layers of the repair. In contradistinction to this good layer, the lateral leaf of transversalis fascia in the more extensive hernias is often frayed and almost nonexistent. In such cases this leaf only serves to assist in taking up the slack in the floor, with Poupart's ligament being engaged to support it in the second layer. Another important advantage of opening the transversalis is the access that it gives to the femoral ring. A not inconsiderable proportion of so-called recurrent hernias are ascribable to overlooked femoral defects. As to the other direction, superior and lateral to the internal ring, Koontz[4] emphasized the importance of recurrence in that area. There, too, by use of the method here described, defects can be detected easily and repaired. One great advantage of wire for sutures in event of infection of the wound is that it does not have to be removed. It does not seem to hinder or prolong drainage; indeed it gives support until granulation and fibrosis fills in after the infection. A disadvantage is that wire is much more awkward to handle until one becomes experienced in its use, and care must be taken that it does not kink, for it may break at the site. Also, it can cut through tissue if drawn too tight. But these are difficulties, not contraindications.

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Community Mental Health Services

Operation in San Jose

RUTH J. LEVY, *Ph.D.*, San Jose

• **Recent attempts to cope with the growing and costly problem of mental illness are progressively emphasizing prophylaxis and early detection and treatment. California has joined this trend forcefully since the passage of the Short-Doyle Act in 1957.**

San Jose is one of the communities with a Community Mental Health program, financed 50 per cent by the local government and 50 per cent by the State of California. It implements its program by offering consultative services to the city's public health nurses, police officers, teachers, social workers, ministers, sanitarians and members of staffs of a number of public and private agencies.

Results of the program have been: (1) Increased demand for education in mental health; (2) growing number of requests for case consultation in lieu of patient-referral to already overburdened psychiatric facilities, and (3) growing recognition by consultees of the importance of their own self-awareness.

A SURVEY OF CARE in the field of mental illness showed a progressively stronger emphasis on mental health and mental hygiene.[8] Psychiatry has its roots in the physician's attempts to grapple with mental illness on a scientific basis. But he did so, at first, only within the confines of the institutional setting. Now it is no longer possible to segregate out of the community all persons whose mental and emotional health are less than optimum. There are not enough hospitals, hospital beds or psychiatrists to do so. Perhaps it has been this very practical consideration as much as our new clinical insights that has altered the course of mental hygiene. Thousands are now treated in out-patient clinics and private offices. The "day hospital" and the "night hospital" have been born. Where formerly the doors were locked, now the hinges on state hospital doors have been oiled and patients move out as well as in. But unless we can prevent mental and emotional illness, our treatment programs still are just stopgaps.[3,10]

A beginning has been made in the prevention of mental illness where cause and effect are known. Thus, for example, cases of general paresis have become historically interesting rather than clinically problematic. It has been said that a meaningful preventive program cannot be built without knowing what causes the illness that is to be prevented. This is, of course, logical, but in an emergency—and looking upon mental illness as Public Health Problem Number One, perhaps we can refer to an emergency without stretching the facts too far—one uses many techniques, not only the tried and true.

In recognition of the need for a change of approach, agencies are working toward emphasis on programs concerned with the prevention of mental illness and the maintenance of good mental and emotional health. On July 10, 1957, a law was enacted in the State of California (Subchapter 3, Register 57, No. 19 of the California Administrative Code), known as the Short-Doyle Act, which facilitates optional action on the part of local governments wishing to establish mental health services.[1] In nonlegal language what this means is that if a local community wishes to establish community mental health services, the money it sets aside for this purpose will be "matched" by the State of California, provided the stated prerequisites are met. There are 11 states with similar legislation. In the State of California there are now 11 counties and one city with community mental health programs operating under this law. The purpose of this paper is to describe some of the services being rendered under this program in the City of San Jose.

San Jose is 50 miles south of San Francisco. In 1955 its population was 125,000. Today it has 160,000 residents. A projection made by the city predicts a population in 1970 of 800,000. Once largely agricultural, the economy is rapidly becoming industrial. The population is varied socio-economically and culturally. Twenty per cent of San Jose's public school children come from families in which Spanish is the predominant language. For this varied and growing population, the "Community Mental Health Service," now in its second year, is staffed by two psychiatrists, two clinical psychologists and one psychiatric social worker. The service is in the purview of the city's department of health.

San Jose's program is unique in that it provides no direct service such as is ordinarily provided in a

This article was read in manuscript and approved by Stanley Milstone, M.D., director of the Short-Doyle program in San Jose and by Dwight Bissell, M.D., health officer of the San Jose Health Department.

Submitted June 23, 1959.

mental hygiene clinic. There are other facilities for direct service, although woefully inadequate as is true in so many communities today. In addition to 18 psychiatrists in private practice, there are three Community Chest supported agencies and three public agencies, all of which provide treatment and/or counseling services, and all of which are unable to provide enough services to meet the community's demand. (One of these agencies has a "waiting list" of one year's duration.)

The Community Mental Health Service attempts to promote mental health by increasing skills in interpersonal relationships and by effecting attitudinal changes in public health nurses,[4,9] teachers and school administrators,[6] social workers, ministers, sanitarians, police officers, and members of staffs of several other community agencies,[7] so that these "caretakers" will be more effective with their patients, students, clients and charges. The underlying rationale includes doing what New York City's health commissioner, Dr. Leona Baumgartner, called, "building up the capacities of those less well-trained to take over part of the work." This is not to be confused with making the "caretaker" into a pseudo-psychiatrist. Techniques for achieving the above-mentioned goal range from talks to large groups of professional workers or laymen, to small discussion groups and individual consultations.

Perhaps some illustrations from current projects will bring the program into clearer focus:

1. About a dozen clergymen formed a group in order to discuss some of the problems common in all pastoral counseling and asked the San Jose Community Mental Health Service to supply a discussion leader. One of the psychiatrists has been serving in this capacity for more than a year. He meets with the clergymen, all of whom are ministers in local Protestant churches of different denominations. The discussions began on a fairly objective level, but soon, according to the consultant, group members began to interact on the basis of feelings and subjective reactions to the church situations under discussion. Expression of affect and interaction can then be interpreted by the psychiatrist.

2. A relatively small industrial concern, whose staff does include a physician, nurse, psychologist and social worker, asked the Community Mental Health Service to supply a consultant with whom it might explore the relations of the staff with the board of directors and also intrastaff relationships. One of the Community Mental Health Service psychologists has been offering consultation in this setting for a year, exploring with the staff, both individually and in groups, some of the feelings evoked by previous and present experiences with authority figures; reasons sometimes underlying breakdown in communication; the effects of punitive attitudes; and the evolution of certain biases which impede optimum functioning.

3. Some of the school districts in San Jose have asked that the Community Mental Health Service social worker meet with their teachers and principals for (a) case consultation and (b) the purpose of eliciting general attitudes evoked in the teaching profession which affect—either in a salutary or deleterious manner—the behavior and development of students. Such requests are welcome since, to quote Dr. Frank Hladky, Jr., of the Rip Van Winkle Clinic's Guidance Service, ". . . the schools are one place where we can pick up situations early and try to do something about them. If teachers gain understanding and knowledge of emotional problems in children, it may help them to help children without their needing actual psychiatric help later on."

4. At the time the San Jose Community Mental Health Service came into being, the San Jose Police Department was showing an interest in the possibility of in-service training courses covering subjects such as commitment laws, the etiology of mental and emotional illness, techniques in dealing with mentally ill persons and the like. One of the psychologists, together with representatives of the local chapter of the National Association for Mental Health, organized a series of discussions around these subjects for the police officers.

5. A final project chosen for mention is one of several currently being carried on with the public health nurses of the City Health Department. This particular project is under the direction of one of the Health Department's physicians with psychiatric orientation. It involved the organization of a special Child Health Conference, patterned in part after the work of Levy,[5] with the following objectives:

- To help make staff personnel more observant of parent-child, parent-parent and intrastaff relationships and behavior.
- To study attitudes of Child Health Conference personnel and parents.
- To learn how to recognize and assess more quickly emotional problems in children, parents and families.
- To explore methods of giving help adequately and quickly in the face of emotional problems or potential problems.
- To explore what can be done to promote good mental health attitudes in child health conferences and other public health situations.
- To improve interview techniques.
- To learn methods used by parents in child management.

The Community Mental Health Service social worker and one of the psychologists are an integral part of this Child Health Conference. They are involved as participant-observers during the conference itself, and active in the pre-conference and post-conference discussions.

The program director, as dictated by law, is a board-certified psychiatrist. Assignment of psychiatrists, social workers and psychologists to individual projects has been made on the basis of interest and experience rather than on the basis of academic degree.

One of the interesting questions raised by the San Jose Community Mental Health Service staff is whether services rendered should be self-perpetuating, and thus limit the scope of activity in accordance with the size of the staff, or whether some of the projects might be considered in the nature of demonstrations. The staff tends to lean in the latter direction, feeling that an agency which benefits from services rendered may want, in time, to employ its own mental health consultants, thus freeing Short-Doyle personnel to take on new tasks. In one school district this has happened already in the guise of the district's employment of a clinical psychologist as mental health consultant.

Another question has to do possibly with semantics. According to the Short-Doyle Act, in addition to those clinical facilities directly serving patients, two kinds of services "promoting the mental health of the community" are recognized. One is called, "informational and educational service" and the other, "mental health consultation." When necessity demands categorizing a particular project as one or the other, the staff often asks itself how one draws a line between the two, whether a line can be drawn, and what the significance of such a division might be.

It is too early to make a valid assessment or evaluation of the total program but, looking back over the past year, it becomes obvious that whether or not a specific program came into being depended as much on the groundwork which had previously been prepared for consultation as any other single factor.[2]

A potential danger in this service should be pointed out. Since consultation is offered not to psychiatric patients, but to professional workers, the mental health consultant must remind himself that he is not an expert in education, nursing, pediatrics, rehabilitation, police administration and the like. The program would be doomed to failure if the consultees felt their professional worth were being scrutinized by individuals untrained in their respective fields of competence. A psychiatrist, psychologist, or social worker cannot guide a teacher in methods of teaching, a minister in theological precepts or a police officer in law enforcement techniques. What he can do is to help the consultee understand some of the dynamics underlying human behavior and relationships in such a way as to make his skills and training more effective. And, further, he can broaden his own horizons by learning more about educational philosophy from his school-consultees, about law enforcement problems and techniques from police officers, about public health nursing and its aims from the public health nurse-consultee.

Results of the program's impact on the professional workers to whom service is given are evident in:

- Increased demand for didactic presentation of mental health information and concepts;
- More requests for case consultation in lieu of immediate referral to other agencies for psychiatric diagnosis and treatment, and
- Growing recognition by consultees that self-awareness is basic to improvements of interpersonal relationships.

In contrast to situations in which emotional disease may be the main concern of psychiatrist, clinical psychologist and psychiatric social worker, here the focus is on the professional worker who can learn to recognize personality dynamics and thus (a) encourage assets; (b) be forewarned in the presence of potential maladjustment, and (c) play a role in the reduction of exogenous and endogenous tensions.

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Corneal Contact Lenses

Special Value in Severe Anisometropia in Children

ALBERT A. STEINER, *M.D.*, San Francisco

• **Careful selection of patients and skillful fitting result in a high rate of success with corneal contact lenses—over 96 per cent in 339 patients treated in the present series. The lenses were especially valuable in anisometropia in children (11 cases). Children can be taught to care for contact lenses and insert and remove them for themselves.**

SEVERAL ARTICLES on corneal contact lenses have appeared in the medical literature in recent years. There is no intention here to add another series of statistics, but rather to emphasize the value of careful selection of patients and proper fitting, especially in the case of children with severe anisometropia.

Westsmith[5] recently summarized a questionnaire survey of patients who had been fitted with corneal contact lenses; fewer than 50 per cent responded, and among these the rejection rate (those dissatisfied with the lenses) was 9.7 per cent. Among 339 patients at Greens' Eye Hospital, all of them completely followed (which is in itself evidence of general satisfaction) the proportion who rejected the corneal lenses was 3.2 per cent or, if the admittedly experimental cases are eliminated, 2.3 per cent.

Most of the patients are young adults; 33 are over 61 years of age, 21 are under 15, the youngest 5½ years old. Rejections were twice as frequent among the 146 males as among the 193 females. Nearly as many patients use corneal lenses for medical reasons (45 per cent) as for cosmetic reasons (48.5 per cent); a few (6.5 per cent) wanted them primarily for participation in sports. The great majority wear the lenses 13 to 16 hours a day; only 5 wear them less than eight hours.

Nine patients have rejected the lenses, four of them after less than two months' trial. Two objected to "stinging"; 2 had diplopia; 2 found allergic reactions aggravated; 1 was senile, and 1 found them "too much trouble." In the other three cases the use of corneal lenses had been considered experimental. In one case for optic atrophy, in another for a telescopic lens arrangement, and in the third for healed corneal ulcer, which interfered with the fitting.

The eye defects in these cases are best considered by the number of eyes affected, as summarized in Table 1. A special note should be made with regard to monocular aphakia. Spaeth[3] and others have stated their preference for the corneal contact lens in this condition, though Ogle, Burian and Bannon[2] insist that it is rarely possible to reduce aniseikonia (difference in the size and shape of the images of each eye) to less than 9 per cent; patients who are comfortable in spite of the aniseikonia, these investigators believe, have some degree of suppression or are satisfied with confused peripheral vision. Be that as it may, most patients feel comfortable and have better vision with a corneal lens. None of the monocular aphakic patients showed any suppression as tested on the major amblyoscope.

This presentation is intended to emphasize especially the value of corneal lenses for children. Eleven cases of severe anisometropia (difference in refractive power of the eyes) in children are summarized in Table 2. This defect is sometimes discovered because of a deviating eye, in other cases through acuity tests at school. These children were remarkably cooperative, as were their parents, who were greatly encouraged by demonstrable improvement and assisted willingly in maintaining patching of the good eye to improve the amblyopic one. The improvement is maintained if the eyes are straight or can be surgically straightened, though repeated patching may be necessary in some cases. The visual acuity in the anisometropic eye is much better with a corneal contact lens than with a spectacle lens.

Corneal contact lenses may be useful, too, in severe myopia of both eyes. Some children in schools

Submitted November 9, 1959.

TABLE 1.—*Rejection of Corneal Contact Lenses in 339 Cases*

Condition	No. of Eyes	Rejections	
		No.	Per Cent
Myopia (more than half over 5 diopters)	320	4	1.25
Hyperopia (majority over 3 diopters)	43	3	7
Astigmatism, myopic or hyperopic (all over 1.5 diopters)	58	1	1.7
Aphakia, monocular or binocular	83	3	2.8
Keratoconus	25	0	0
Anisometropia	23	0	0
Corneal scarring	6	1	16.6

TABLE 2.—*Anisometropia in Children Treated with Corneal Contact Lenses*

Age	Sex	Eye Defects	Treatment	Corrected Vision
5½	M	Right: Divergent strabismus 40△ due to right severe myopia.	Contact lens, now worn all day. Normal left eye patched. Strabismus to be surgically corrected.	Right, 20/400. Exotropia 25△ and varying.
6	F	Right: Vision 20/350, divergent strabismus 6△, hypertropia 4△.	Contact lens worn all day. Left eye patched. Treatment being continued.	Right, 20/120.
7	M	Right: Vision 20/1000, severe myopia, divergent strabismus 12△, hypotropia 10△.	Contact lens worn all day, left eye patched daily after school. Strabismus surgically corrected.	Eyes straight. Right, 20/120.
7	M	Right: Vision 20/1000, severe myopia, convergent strabismus 15△.	Contact lens worn all day, patching for long periods refused. Strabismus to be surgically corrected.	Right, 20/40.
7	F	Right: Vision 20/350, severe myopia, convergent strabismus 30△.	Contact lens worn all day, left eye patched after school. Right strabismus surgically corrected.	Right, 20/120, eyes straight.
8	F	Left: Vision 20/1000, severe myopia, eyes straight.	Contact lens worn all day, no patching.	Left, 20/60.
7	M	Left: Vision 20/200, severe mixed astigmatism, eyes straight.	Contact lens worn all day, patch right eye.	Left, 20/25.
8	M	Left: Traumatic cataract.	Cataract removed, contact lens worn all day.	Left, 20/20.
9	M	Left: Vision 20/1000, severe myopia, eyes straight.	Contact lens worn all day, right eye patched.	Left, 20/60.
10	F	Left: Vision 20/200, severe myopia, eyes straight.	Contact lens worn all day.	Left, 20/25.
12	M	Right: Traumatic cataract.	Cataract removed. Contact lens worn all day.	Right, 20/20.

△ = prism diopters.

for the partially sighted have been sufficiently improved through these lenses to transfer to public schools.

The most dramatic improvement in visual acuity is obtained in keratoconus (conical protrusion of the cornea), although fitting is the most difficult in this condition. Patients who formerly tolerated a scleral lens for no more than six hours at a time were able to wear a corneal contact lens for 16 hours a day with minimal corneal irritation.

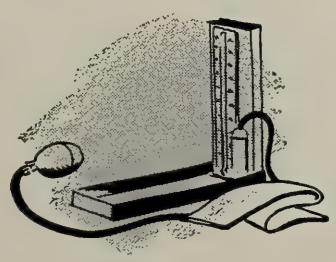
During the fitting period, children tend to lose lenses frequently, but as they begin wearing them for longer periods they also learn to care for them and they lose them less often. Insertion and removal of the lenses by the parents is another fitting problem. If parents are willing, children over 10 years of age are trained to handle the lenses for themselves.

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CASE REPORTS

Recovery from Heat Prostration and Body Temperature of 109° F.

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So FAR AS COULD be determined by inquiry and review of the literature, there is no previous record of a patient's recovering from heat prostration in which the temperature reached (and may have exceeded) 109° F., as occurred in the present case.

REPORT OF A CASE

The patient, a 56-year-old Mexican crop worker, apparently previously in good health, collapsed while at work in the field and was immediately put into hospital. Atmospheric temperature at the time of this occurrence was 114° F. in the shade.

On admittance to hospital the patient was unconscious and had fecal incontinence. The blood pressure was 100/50 mm. of mercury, respirations were 18 a minute and the pulse was weak and thready at a rate of 120. Rectal temperature was at least 109° F., the highest point that could be registered on any of the clinical thermometers available. (Three thermometers were used to make sure, and the column of mercury reached that limit on all of them.) The patient was immediately put into a bathtub, where ice packed about his body melted quickly.

Infusion of 1,000 cc. of 5 per cent glucose in saline solution was begun at 3 p.m. while the patient was still in the tub. At 3:45 the temperature was 106° F. and at 4 p.m. was 103°. Taken out of the tub then and put to bed, the patient became conscious but, as he was irrational and hard to manage, he was strapped down and 100 mg. of promazine hydrochloride (Sparine®) was given intramuscularly. Still intractable an hour later, he was given 100 mg. of meperidine (Demerol®). At 6 p.m. the temperature was 97° and the patient was quieter, and 9 o'clock that night the temperature was 99°. The following morning he was cooperative but confused and irrational, not remembering what had happened the day before. By evening he was less irrational and the temperature was normal. He became normal in every respect in the next few days and he was discharged from the hospital six days after entering, without either physical or mental residual effect and with all reflexes normal.

Submitted July 2, 1959.

SUMMARY

A patient with heat prostration, the body temperature reaching at least 109° F., recovered in a few days and had no residual abnormality.

319 Third Street, Calexico.

Congenital Varicella with Primary Varicella Pneumonia

TIMOTHY F. BREWER, *M.D.*, Los Angeles

A RECENT REPORT[2] of primary varicella pneumonia mentioned that only five cases have been reported in persons under the age of 19. The case here reported is perhaps the first case in the literature of primary varicella pneumonia complicating congenital chickenpox, with the patient recovering.

REPORT OF A CASE

A 14-day-old white baby was admitted to the Communicable Disease Unit of the Los Angeles County General Hospital on August 24, 1959, with chickenpox. Chickenpox developed in his mother five days before delivery. At birth the baby was isolated from her, was observed in the hospital for two days, then discharged to the care of his grandmother. When he was ten days old, vesicular exanthem developed on the chest and abdomen, and his grandmother said he had fever. Three days later the body temperature rose to 102° F., two convulsions occurred and the patient was returned to the hospital.

The only abnormality noted on physical examination at that time was a papulovesicular rash, in all stages of development, over the entire body.

The rectal temperature was 102.2° F., the pulse rate 140 and respirations 60 per minute. The body weight was 6 pounds and 14 ounces (weight at birth was 8 pounds, 2 ounces).

Leukocytes numbered 10,600 per cu. mm.—52 per cent polymorphonuclear cells and 48 per cent lymphocytes. Hemoglobin content was 16 gm. per 100

From the Communicable Disease Service of Albert G. Bower, M.D., Chief Physician, Los Angeles County General Hospital, Los Angeles 33.

Submitted December 21, 1959.

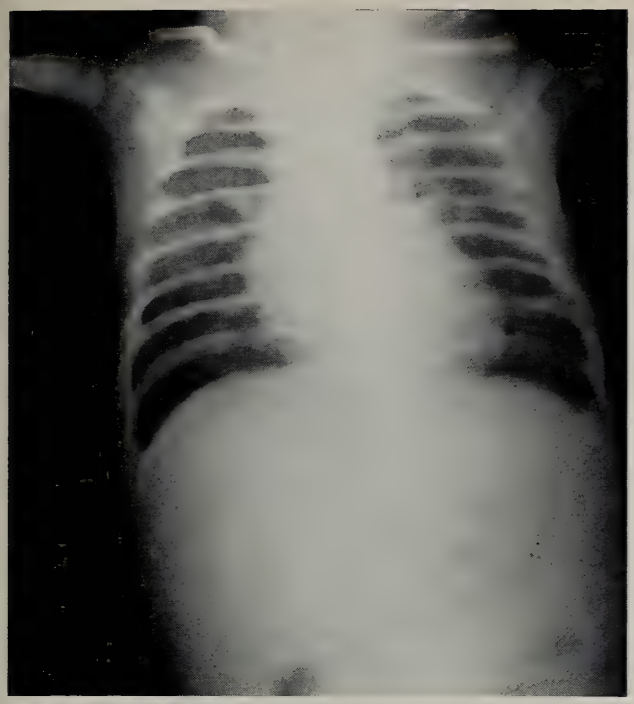


Figure 1.—Multiple patchy densities are evident throughout both lung fields.

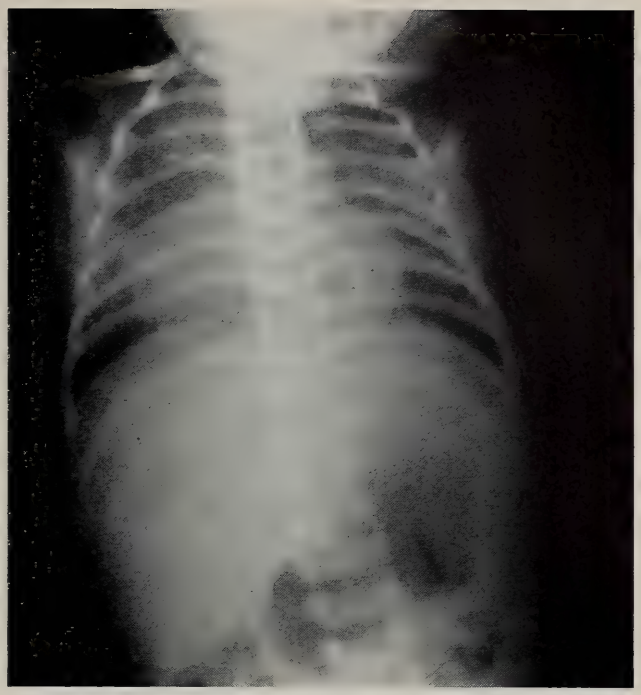


Figure 2.—The densities in the right lung field are now confluent, the left is unchanged.

cc. of blood. The urine gave a one plus reaction for albumin but was otherwise normal. Upon lumbar puncture, the opening pressure was 225 mm. (water) with the baby quiet. The puncture was traumatic and slightly cloudy fluid was obtained, containing approximately 1,300 erythrocytes and 27 leukocytes —all lymphocytes—per cu. mm. Sugar content was reduced by 4 drops of solution, and there was a faint reaction to a Pandy test.

The initial impression was varicella with encephalitis.

The patient was admitted to the ward and, except for the administration of 11 cc. of gamma globulin, was given only symptomatic treatment. Shortly after admission, harsh breath sounds without rales were noted in both lungs. An x-ray film of the chest taken at this time showed widespread patchy densities throughout both lung fields, which were believed to be due to primary varicella pneumonia (Figure 1). The baby was then given procaine penicillin, 600,000 units intramuscularly every twelve hours, chloramphenicol, 50 mg. intramuscularly every eight hours, and prednisone according to the following schedule: 10 mg. every six hours for four doses, then 10 mg. every eight hours for three doses, then 5 mg. every six hours for four doses. He was also placed in a croupette with oxygen flowing at six liters per minute.

The following morning the body temperature was 99.4° F. rectally and he was much improved. On the fourth day in the hospital, with the antibiotic dosage unchanged but the steroid dose reduced to 5 mg. twice daily, rib retraction upon respiration developed and the patient became restless and anorexic. Therefore, the dosage of prednisone was increased to 5 mg. four times daily. The rectal temperature was

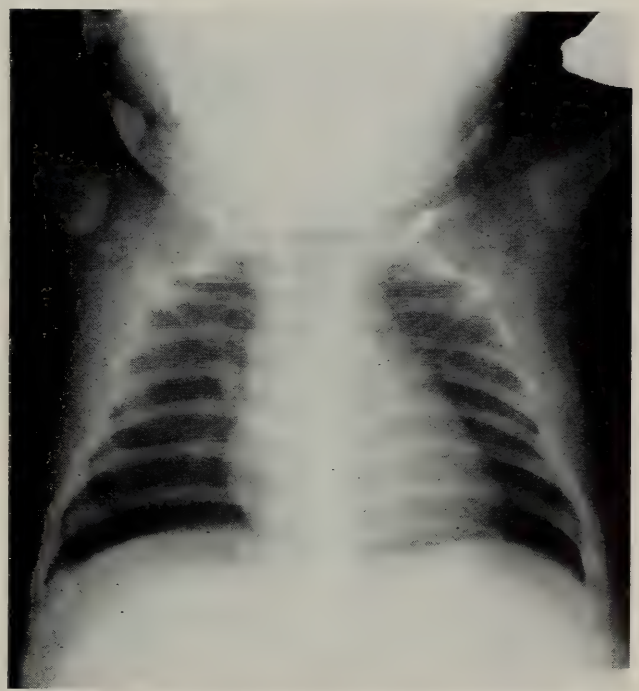


Figure 3.—Complete resolution of previous infiltrates is seen.

100.0° F. and it increased further to 100.8° F. for one day, then declined to 98.6° F., and the patient then remained afebrile. An x-ray film of the chest at the time of relapse showed that the infiltrate in the mid-lung and lower lung fields on the right had become confluent (Figure 2). The left lung was unchanged. Use of the croupette was discontinued on the fifth hospital day. On the eighth day the lungs became clear to auscultation.

After four days at 5 mg. four times a day, the

steroid dose was reduced to 5 mg. three times a day for four days, to 5 mg. twice a day for four days, to 2.5 mg. every eight hours for three days, to 2.5 mg. every twelve hours for two days and finally to 2.5 mg. daily for two days. Each day for the last four days of steroid treatment, 20 units of corticotropin (ACTH) gel was given intramuscularly. The total amount of prednisone given was 290 mg.

Antibiotics were discontinued at the same time as the steroids, on the twenty-first hospital day.

An x-ray film of the chest at the time of discharge showed considerable improvement, only patchy areas of consolidation remaining. Because of the known lag[13] between clinical condition and the roentgenographic appearance of the lungs, this was not considered a deterrent to discharge. The total stay in hospital was 30 days.

When examined again two weeks after leaving the hospital, the child was doing well. The lung sounds were normal and an x-ray film showed no lesions (Figure 3).

DISCUSSION

In this case, many of the previously tried agents for treatment were used—antibiotics, croupette, gamma globulin and steroids. Antibiotics have been tried numerous times before and it seems to be generally agreed that they may serve as prophylaxis against secondary invaders but do not influence the course of primary varicella pneumonia.[3,5] In this case, the patient's condition became worse while he was receiving antibiotics, and improved with no change in either dosage or type of antibiotic. The same is true of the croupette.

Gamma globulin has been advocated as a treatment for varicella[12] and has been used in primary varicella pneumonia[5]; but in the present case it appeared to have little if any effect, the condition of the patient having become worse after it was given and then improving without further use of gamma globulin.

That leaves the steroids, which, it is believed, were life-saving in this patient. The patient's condition fluctuated in a direct relationship to the daily dose of prednisone. The mode of action of steroids is not definitely known, but probably is related to their anti-inflammatory properties. Corticotropin may not have been necessary; it was used because of the relapse which occurred when the steroid dosage was first reduced.

The use of steroids in virus diseases is a problem which is far from settled. It has been assumed that virus diseases in general, and chickenpox in particular, are aggravated by the use of steroids.[9,10] Recently, however, this attitude has changed and steroids have been used in such virus diseases as herpes zoster, mumps orchitis and infectious hepatitis.[9] In the case of varicella pneumonia at least, it would appear that the question is not whether, but when. Primary varicella pneumonia occurs from the second to the fifth day after onset of exanthem—in the present case, on the fourth day. By then the rash is disseminated. The use of steroids at this stage would seem unlikely to cause further exacerbation but, as in the case here reported, may be life-saving.

Cases of primary varicella pneumonia are not numerous so that large series cannot be gathered to assess therapy. Bower[1] has reported fifteen cases from this hospital treated with steroids. His mortality was zero. Hunnicutt and Berlin[5] reported one case of a 26-year-old white female treated with 25 mg. prednisone daily. Her condition deteriorated before it improved. She also received antibiotics and gamma globulin in addition to supportive measures. Her dose of prednisone may have been harmful, it may have been insufficient, and it may have been ill-timed as she was still erupting when it was given. She recovered. Thompson and Cantrell[11] report the case of a 31-year-old white female successfully treated with prednisolone, 40 mg. daily at the beginning and then tapered over a two-week period. Other measures included tetracycline, oxygen, Alevaire,® and mild sedation. For the same reasons as in our patient it is doubted these other measures were more than supportive. Fitz and Meiklejohn[3] present the case of a 25-year-old white female treated with antibiotics and supportive measures without success, but responding rather rapidly when hydrocortisone was added to her regimen. Rosecan, Baumgarten and Charles[8] published the case of a 36-year-old white male treated with intravenous aqueous adrenal cortical extract and intramuscular cortisone. This case was complicated by shock both preceding and coincident with the use of steroids, and congestive heart failure following the use of steroids. As the electrolytes remained normal during treatment, the question of whether the steroids contributed to the failure is not documented. That should not be much of a problem today, however. Their patient recovered.

The mortality rate of primary varicella pneumonia has been reported as 16 per cent.[11] In this report, we have followed the courses of twenty patients treated with steroids, all of whom recovered.

Including our case, four cases of congenital chickenpox with primary varicella pneumonia have been reported.[6,7] We believe this is the first to have survived.

SUMMARY

In a case of congenital chickenpox with primary varicella pneumonia, steroids were used in the treatment. The patient recovered. This is believed to be the first successfully treated case. This therapy is considered to be worthy of further study.

VA Center, Wilshire and Sawtelle Boulevards, Los Angeles 25.

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Skin Cancer in Smallpox Vaccination Scars

A Report of Five Cases

CLETE S. DORSEY, *M.D.*, Pasadena,
WILLARD MARMELZAT, *M.D.*, Beverly Hills, and
NORMAN LEVAN, *M.D.*, Bakersfield

THE PURPOSE OF THIS ARTICLE is to report five cases of an interesting phenomenon—the formation of basal cell skin cancers within smallpox vaccination scars. This occurrence was observed independently by all of the authors, all of whom practice in Southern California.

CASE 1. A 54-year-old man was observed because of herpes zoster involving the left shoulder. It was noted that half the vaccination scar in the left deltoid area had been replaced by a typical basal cell carcinoma. The outer edge of the tumor had taken the exact shape of the scar. It was removed and microscopically identified as a basal cell epithelioma. The man had a densely freckled skin from the waist up, evidence that he had spent a great deal of time in the sun at some time in his life.

CASE 2. A 48-year-old man, seen because of a recent change in a smallpox vaccination scar in the right deltoid area, had a spongy, granulomatous mass about 1 cm. in diameter replacing the scar and sharply limited to the boundaries of the scar. The tumor was removed and proved to be a basal cell epithelioma. The vaccination scar which had become carcinomatous had been present since early childhood. Another vaccination mark was present about two inches lower on the right arm. This one was only seven years old and showed no signs of malignant degeneration. The patient had a densely freckled skin from the waist up.

Submitted October 1, 1959.

CASE 3. A 48-year-old Caucasian woman with a swarthy complexion was seen for the treatment of infected sebaceous cysts involving both earlobes. Upon examination, a dark, brownish-black tumor was noted in the right deltoid area. It measured 2 by 1.5 cm. and completely filled the site of a smallpox vaccination scar which dated back to early childhood. Removed, the tumor was identified as a pigmented basal cell epithelioma. Several years later a second basal cell carcinoma developed within a small, depigmented scar on the right forehead.

CASE 4. A 44-year-old white man was observed because of a lesion located within a smallpox vaccination scar in the left deltoid area. The lesion was removed and histologically identified as a basal cell carcinoma. Two years previously the patient had had a small basal cell carcinoma removed from the back of his neck and two years later another small one appeared on the left temple area.

CASE 5. A 53-year-old woman of Mexican ancestry was seen because of ulceration within the center of a tumor 6 mm. in diameter which developed within a smallpox vaccination scar which dated back to childhood. The lesion was removed. The pathologist reported it "basal cell carcinoma."

COMMENT

It is interesting to speculate on why the vaccination scars in these patients became carcinomatous. There is extensive literature dealing with the problem of skin cancer in scars. So far as could be determined, there was no suggestion that some scars, particularly those on exposed areas of the body, become malignant because of carcinogenic rays of the sun. We would like to suggest that the carcinomas in the present cases may have been so caused. Two of the patients had a swarthy complexion—the kind ordinarily resistant to sunlight. The skin at the site of vaccination scars, however, was thinner and paler than the skin elsewhere on their bodies, which perhaps reduced whatever protection swarthiness offers. In the mild climate of Southern California there is much more likelihood that the deltoid region would receive a toxic amount of sunlight than would be the case almost anywhere else in the world. We believe that this is one reason why five cases of this type would be seen within a relatively short time by physicians practicing in this area whereas there has been only one other similar case report in the world literature.[1]

On the basis of the five cases reported here (and two others observed by one of the authors, one of the patients dying) we believe that any change within a vaccination scar should be thoroughly investigated. Whenever the diagnosis is not immediately apparent, biopsy is advisable.

65 North Madison Avenue, Pasadena (Dorsey).

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California MEDICINE

For information on preparation of manuscript, see advertising page 2

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EDITORIAL

The Governor's Committee

IN THE PAST FEW YEARS medical care has come to be ranked almost even with food, clothing and shelter among the essentials of humans. Whether owing to spontaneously occurring public demand for more and better care or to political hay-making, the fact is that the trend is clearly in the direction of classifying medical care almost as a basic human right.

Nowhere has this attitude been more apparent than in the efforts of political figures to place medical care in the category of a publicly-controlled utility. While such efforts have thus far been defeated in great part, the motivation still persists and efforts in this direction are still being made.

What Stalin did in Russia, Bismarck in Germany and Lloyd George in Great Britain, some American politicians would seek to duplicate today. The fact that the nationalization of medicine in those countries was a forerunner to a complete socializing movement seems to bother some American public figures not at all; to them, political expediency indicates the desirability of absorbing into the public domain an entire profession of skilled practitioners for the sole end of making their services a largesse to be distributed by those in power in our national or state capitals.

Thus, while the medical profession in California certainly can welcome and abet the stated aims of the Governor's Committee on Study of Medical Aid and Health, surely physicians can be forgiven some cautiousness of attitude, in light of the purposes to which many another political "study" has been put in the past two decades, until it becomes quite certain that the inquiry is not somehow deviously to be made a bureaucratic vehicle to deliver the practice of medicine into the control of a state agency.

Acting on whatever motive, Governor Brown early last year created a group of six people, one drawn from the public and the other five from career people in departments of the State of California. This group was instructed to review the health needs and health care of the people and to recommend proposals for making improvements.

The report of this group, strictly an inside affair in the government of the state, was completed last October. The group found, in a brief report (which offered no documentation) that the people of California needed more in the way of health care, that facilities in this field needed an overhauling, that the costs of health care were beyond the means of the people and that something ought to be done about the whole thing.

The "something" was a proposal for appointment of a representative committee of citizens, charged with surveying the whole field of health care and advising the Governor as to areas where legislative action would be needed to assure more, better, more available and less costly medical services for the population.

The Governor acted promptly and named a committee of 17 citizens to make this survey. The members were drawn from the fields of education, labor, law, medicine, hospitals and consumers. Later on, representatives of dentistry and nursing were added, to make a 19-member group. Fortunately, in the medical profession and others, his appointments were of outstanding men. The physicians on the committee are Paul D. Foster, president of the California Medical Association, T. Eric Reynolds, the immediate past president, and Roger O. Egeberg, medical director of the Los Angeles County Department of Charities.

For the past three months this committee has met and met again, always under the urgency of a November 1, 1960, deadline for its final report.

During these same three months it became obvious that research into the field of health care is just like research into anything else—every time you put down a point to be explored, a dozen more spring up as corollaries. The job keeps growing.

In these circumstances the committee members—all but a few of them people who have regular vocations and serve as volunteers—cannot possibly encompass the field of inquiry which has been opened up. Consequently, they must leave the performance of the research to the professional staff people who have been assigned from various departments of the state government. The committee members have been presented with a list of research proposals which even the professional staff cannot study with justice and objectivity in the short time available.

The picture thus resolves itself into a group of citizens, each with his own private or personal interests, serving as listening posts to a group of state employees who, serving under state agency conditions as they do, hardly can be expected to make recommendations to decrease the position of the state government in providing services by the government for the voters.

Physicians have a vital interest in this whole procedure, since they represent the keystone in the structure of medical care. As matters now stand, it might happen that next November when the report of the committee is made, a Citizens' Committee will somehow seem to be involved in a recommendation that physicians become virtually state employees and that medical services shall become a property of the state, to be dispensed under such conditions as state officials dictate.

Many physicians have been only vaguely aware of the existence of this committee and very few of them have had any information on the lines of study being followed by the committee. Where these facts are known, it becomes obvious that a serious threat to the private practice of medicine may emerge from this particular operation.

It is vital to the welfare of the profession that the studies and procedures of this committee and of its "task forces" that have been named to review various facets of the overall inquiry must be carefully followed, studied and analyzed. Should the final report of this group include recommendations for the taking over of medical practice as a state prerogative, to be dispensed under the direction of an agency of the state, the profession will find itself again in the unenviable position of defense.

The events of 1945 in California, and national events of 1948 under the Wagner-Murray-Dingell proposal, are still fresh in many minds. Let us hope that the Governor's Committee on Study of Medical Aid and Health will not stir up another battle comparable to these two. The medical needs of the people are too demanding to afford such a diversion of medical resources and medical thinking.

Positive Public Relations

THE PROFESSION of medicine has suffered in recent years by the outspoken and reiterated accusation by social or political adversaries that medical organizations are always against something and are in reality an economic combination of physicians interested only in advancing their own welfare. Such epithets as "the medical trust" are typical of this sort of abusive attack.

The many and constant activities of organized medicine that are entirely in the interest of better medical care and better health for all people are rarely celebrated, perhaps because they are, in a word—a word that here can be used with pride—ordinary.

Several weeks back the then president of the California Medical Association, Doctor T. Eric Reynolds, gave the lie publicly to this sort of accusation. Interestingly, his calm and unemotional report, distributed to the press, drew a good response from editors who saw fit to run the story and quote liberally from it.

Doctor Reynolds concentrated his statement on two principal items. First, the matter of membership growth of the California Medical Association and, second, the contributions by California physicians to the American Medical Education Foundation for the training of future physicians.

The C.M.A. membership, he pointed out, has gone steadily upward for a number of years. This belies the charge that physicians seek to keep out newcomers as a means of retaining all the medical practice in the area. As to contributions to the A.M.E.F., he pointed to the unique position of a profession contributing money from its members' pockets to train new physicians who, from a strict economic point of view, are potential competitors.

It is easy to supplement Doctor Reynolds' statements to show how medical organizations work in the public interest. From either the state or the county society level, the list of accomplishments *pro bono publico* is not only long but the efforts that have been made have been remarkably efficient.

The California Medical Association and its component societies have set up services for the placement of physicians seeking to locate in the state. They have established blood banks in strategic locations and banded them together into a clearinghouse system which guarantees any patient any amount of any type blood he needs, when he needs it.

They provide the Cancer Commission which car-

ries on a continuing program of seeking out and disseminating what is new and good in the field of cancer research and treatment, and of exposing quackery.

They have set up emergency telephone systems to locate individual physicians or to secure the services of another physician in case of emergency. They have sponsored medical sections of disaster relief organizations which have reacted instantaneously and effectively in time of need. A fine example was seen in the recent railroad-truck crash in Kern County, where volunteer medical services were credited with saving many lives and alleviating or reducing the seriousness of a large number of injuries.

The county societies have also set up referral services which are open to new residents of an area who need help in selecting a family physician or a specialist. They have participated in a number of immunization programs in the public interest. They have established review committees where patients may appeal from controversies with physicians.

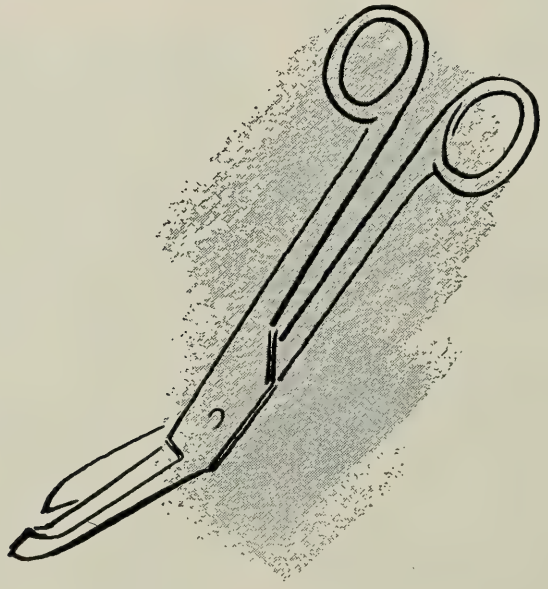
They cooperate with public and other officials in the interest of traffic safety. Peace officers, firemen and other officers work with them for the alleviation of suffering in accident and similar cases where only the professional skill of physicians can contribute so much good for people.

Often overlooked but certainly not forgotten are the services of medical societies in staffing county hospitals, where the indigent patients receive the finest in medical care at no cost to themselves or to their county governments and in the operation of clinics for indigent and low income groups.

These are a few of the services which medical organizations can and do perform. These are some of the things that physicians in organized groups can accomplish that individual physicians can not.

Many physicians are growing weary of the oft-repeated charge that the doctor as an individual is a fine person but that somehow the organization that he has created is an evil, self-seeking cartel. Critics who voice this sentiment are prone to forget that these organizations are made up of fine individual physicians and that through organization they enhance and extend the powers for good of the individual.

A simple analysis of some of the functions of medical organizations brings to light the many fine public services performed by these groups. Critics of medical associations, whatever their motives, are invited to name any other professional, business, labor or trade organization which can match the record of public service of medical associations. *Res ipsa loquitur.*



California MEDICAL ASSOCIATION

NOTICES & REPORTS

Transactions of the House of Delegates

Los Angeles, February 21-24, 1960

Note: The following report of the transactions of the House of Delegates of the California Medical Association is selected and abridged. A complete transcript of all proceedings is on file in the Association office in San Francisco and available for the inspection of all members.

REFERENCE COMMITTEES

COMMITTEES APPOINTED by Speaker James C. Doyle at the first meeting of the House of Delegates Saturday evening, February 20, were as follows:

Committee on Credentials: Wells C. Cook, Los Angeles, chairman. (To facilitate registration, the Speaker and Vice-Speaker last year inaugurated two Registration Boards, one to deal with the registration of the Los Angeles delegation, the other to handle the delegates from all the state except Los Angeles.)

Los Angeles Delegation: A. J. Murrieta, Jr., Los Angeles; Don J. Hunter, North Hollywood; Jay B. Cosgrove, Los Angeles, alternate.

All except Los Angeles: Melvin Hart, Oakland; Nathan Dubin, Lincoln; Robert B. Smalley, Willits; L. H. Fairchild, Carlsbad, alternate.

Reference Committee 1. (This committee reviews the reports of the officers, the Council, the commissions, and standing and special committees.) Fred E. Bradford, Los Angeles, chairman; Willard Newman, San Diego; James Yant, Sacramento; E. E. Wadsworth, San Gabriel, alternate.

Reference Committee 2. (This committee reviews the reports of the secretary and the executive secretary and studies and makes recommendations to the House of Delegates on the budget submitted by the Council and the amount of dues for the ensuing year.) Robert L. Dennis, San Jose, chairman; Lawrence F. Whittaker, Huntington Beach; James J. Benn, Jr., Ripon; William Kaiser, Berkeley, alternate.

HEARINGS ON C.M.A. CONTINUING EDUCATION AND SCIENTIFIC ACTIVITIES

The C.M.A. Committee on Continuing Education and Scientific Activities will hold two open hearings within the next two months. One is scheduled for 9:30 a.m., June 19, at the Hilton Inn, International Airport, San Francisco. The other will be held July 10 beginning at 9:30 a.m., at the Hyatt House, 5547 Century Boulevard, Los Angeles.

Any C.M.A. member wishing to appear at either meeting is invited to do so.

Reference Committee 3. (This committee considers new and miscellaneous business.) Joseph Telford, San Diego, chairman; Elmer Gooel, Beverly Hills; Don C. Musser, San Francisco; John F. Murray, Fresno, alternate.

Reference Committee 3A. (This committee will supplement the efforts of Reference Committee 3 which in the past has carried a far heavier burden than it should.) Robert C. Combs, San Francisco, chairman; William F. Quinn, Los Angeles; Frederick T. Hunt, Santa Ana; John D. Coughlin, San Bernardino, alternate.

PAUL D. FOSTER, M.D. President
WARREN L. BOSTICK, M.D. President-Elect
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Reference Committee 3B. (This committee also is a supplement to 3 and 3A.) Charles E. Grayson, Sacramento, chairman; Albert Miller, San Mateo; Harold B. Miles, Santa Barbara; Charles L. Dimmler, Jr., Piedmont was an alternate, but because of the illness of his wife, he is unable to be with us.

Reference Committee 4. (This committee considers amendments to the Constitution and By-Laws.) Roberta Fenlon, San Francisco, chairman; August J. Haschka, Pacific Palisades; Frank C. Melone, Ontario; Walter H. Brignoli, St. Helena, alternate.

Reference Committee on California Physicians' Service. Ben D. A. Miano, San Bernardino, chairman; Wilbur G. Rogers, Glendale; Edward Liston, Palo Alto; Seymour Strongin, Bakersfield, alternate.

The Constitution Study Committee. C. J. Attwood, Oakland, acting chairman; Sam J. McClendon, San Diego, chairman; Robb Smith, Orange Cove; Carl Hadley, San Bernardino; James Moore, Ventura; Fred Olson, Fortuna; James Yant, Sacramento; Jay J. Crane, Los Angeles; Leslie Magoon, San Jose; Edgar Wayburn, San Francisco; Edward Levy, San Diego.

' ' '

PRESENTATION OF FIFTY-YEAR AWARDS

Pins commemorative of 50 years of membership in the California Medical Association have been presented to the following physicians:

Dr. Eugene V. Falk, Modesto.

Dr. Thomas L. Rogers, Long Beach.

Dr. Clayton G. Stadfield, Idylwild.

Dr. Robert T. Sutherland, Oakland.

' ' '

STUDENT A.M.A. REPRESENTATIVES

The representatives from California medical schools to the Student American Medical Association were introduced:

From Stanford University: Duane Gainsberg and Gordon Calloway.

From the University of California, San Francisco: Richard Mauer and Lester Ulein.

From the University of Southern California: Craig Johanson and Betty Bernard.

From the University of California at Los Angeles: Hal Allen and Dave Cryan. And there are two others from U.C.L.A.: Paul Holland and Duane Townsend.

From the College of Medical Evangelists: Edwin Urich and Eugene Shakespeare.

' ' '

WOMAN'S AUXILIARY

Mrs. T. A. Poska, president of the Woman's Auxiliary to the California Medical Association, reported on the activities of that organization in her year of tenure. The report was published in the April, 1960, issue of CALIFORNIA MEDICINE, page 309.

C.P.S. BOARD OF TRUSTEES

The following is an abstract of a supplemental report of the C.P.S. Board of Trustees that was made by Dr. Arlo A. Morrison, president of the Board:

The number of beneficiary members as of December 31, 1959, was 781,281, a gain of 6 per cent in the calendar year.

Income from commercial programs rose to $39 million. After provision for reserves and administrative expense, approximately $32 million of this amount was disbursed in payments to providers of services under these programs. In addition about $18 million was received and disbursed under the Veterans, the Medicare and the Public Assistance government programs.

Administrative expense was reduced by $230,000 in 1959 as compared with the previous year, and further savings are in prospect as automation is extended and processes are speeded.

C.P.S.'s reserve account was well above $13 million as of December 31, 1959, a figure somewhat above the amount needed to meet the recommendation of the National Association of Insurance Commissioners with regard to Blue Shield plans.

Doctor Morrison reviewed the history of the adoption of legislation to provide health insurance benefits for federal employees and pointed out that the law had been passed with a suddenness which had not been anticipated. Since the federal law covered all federal employees and crossed state lines, he said, the Blue Shield Commission, which has been active since 1946, became the agency of the prepayment "Blue" plans for medical practice.

Due to the shortage of time before the July 1, 1960, effective date of the act, he stated, negotiations were held at a rapid pace and the final contract with the federal Civil Service Commission had been submitted just two weeks earlier.

California Physicians' Service, Doctor Morrison said, had conducted a survey among its physician members as a means of determining their wishes as regards a contract for federal employees. He outlined some of the questions on the survey and told why the language of these questions had been used. The vote of physician members, he said, was seven to one in favor of servicing the proposed contract for federal employees.

Doctor Morrison also pointed out that the federal employees will each have a choice between four different types of medical care plans. The Blue Shield-Blue Cross type, represented by C.P.S., will be renegotiable periodically and inequities that appear may be adjusted.

In regard to medical foundations existing in some counties, Doctor Morrison reported that C.P.S. had agreed to provide insurance services for them under

the federal employees' program, so long as C.P.S. would not suffer financially. This attitude, he said, was based on a desire by C.P.S. to provide such services as physicians wished to provide for their patients on a sound basis.

COMMITTEE ON MEDICAL SERVICES

A supplemental report of the Committee on Medical Services was made by Dr. Francis J. Cox, chairman. The report was published in full in the April, 1960, issue of CALIFORNIA MEDICINE, page 293.

ACTION ON RESOLUTIONS

The 1960 House of Delegates dealt with 82 resolutions, four of them emergency measures which were introduced at the final meeting of the House and voted upon without referral to a Reference Committee.

These resolutions are shown here in serial order and in the form in which they were acted upon, including amendments approved by the House of Delegates or substitute forms approved by the House.

In several instances the Reference Committees saw fit to combine several resolutions on the same topic and to submit a substitute resolution in place of all original proposals. Where this was done, the earliest numbered resolution is shown here as the one upon which action was taken, and the other resolutions combined with this are shown by reference further along the list.

"CALIFORNIA MEDICINE"

Resolution No. 1.

Author: Eugene S. Hopp.
Representing: San Francisco Medical Society.

WHEREAS, it is well recognized that CALIFORNIA MEDICINE is a most valuable and useful publication; and

WHEREAS, new members should serve on boards and committees for their own education and for the possible betterment of the board; and

WHEREAS, in more than ten years, of the forty-three members of the Editorial Board of CALIFORNIA MEDICINE, only nine have been replaced, and these only because of death or retirement from practice or illness; now, therefore, be it

Resolved: That the Council of the California Medical Association refer this to an appropriate committee to study the method of appointment of members of the Editorial Board of CALIFORNIA MEDICINE and to make recommendations for such methods of appointment and limitation of terms of service to five or ten years or whatever number of years would preserve best editorial policy and best serve the physicians of California.

ACTION: Adopted by House.

LEGAL REPRESENTATION DURING EXAMINATION

Resolution No. 2.

Author: Eugene M. Webb.
Representing: San Francisco Medical Society.

WHEREAS, the courts have decreed that patients being examined for the purpose of testimony are entitled to legal representation during the examination; and

WHEREAS, the presence of a third person basically interferes with a physician's capacity to evaluate his patient; and

WHEREAS, such a decree makes a mockery of the medical examination; now, therefore, be it

Resolved: That the House of Delegates instruct the C.M.A. Council to take any and all appropriate steps, in liaison with the State Bar Association, to remove this encumbrance.

ACTION: Adopted by House.

REGIONAL RELATIVE VALUE FACTORS

Resolution No. 3 (Regional Relative Value Factors) and Resolution No. 7 (Economic Trends and Locale) were combined by the C.P.S. Reference Committee into the following resolution:

Resolution No. 3.

Author: Karl L. Schaupp, Jr.
Representing: San Francisco Medical Society.

Resolved: That future contracts made by C.P.S. should be based on the Relative Value Study; and be it further

Resolved: That C.P.S. should investigate the feasibility of applying different unit values to reflect prevailing rates in various localities.

ACTION: Adopted by House.

ANNUAL MEETING DATES

Resolutions No. 4 and 32 were combined by Reference Committee No. 3 and the following substitute adopted:

Resolution No. 4.

Author: Edgar Wayburn.
Representing: San Francisco Medical Society.

WHEREAS, the House of Delegates by unanimous vote in 1959 requested of the Council that the annual session of the C.M.A. be returned as nearly as

possible to its usual meeting date, believing that the February date precludes the possibility of adequate preparation by delegations for the meeting; now, therefore, be it

Resolved: That the Annual Session of the California Medical Association shall occur between the 15th of March and the 15th of April of each year. The time, place and exact dates of the meeting shall be determined by the Council five years in advance and announced to the House of Delegates at the second meeting at each Annual Session.

ACTION: Adopted by House.

PSYCHIATRIC COVERAGE

Resolution No. 5.

Author: Charles W. Leach.
Representing: San Francisco Medical Society.

WHEREAS, medical coverage of psychiatric cases is not provided by C.P.S.; and

WHEREAS, this would be desirable both for patients and their physicians; now, therefore, be it

Resolved: That C.P.S. should continue its study of the feasibility of providing inpatient psychiatric coverage for acute psychiatric emergencies, and provide such coverage when it is actuarially sound.

ACTION: Adopted by House.

C.P.S. HOME CARE

Resolution No. 6.

Author: Charles W. Leach.
Representing: San Francisco Medical Society.

WHEREAS, in order to cut down on hospital costs and accusations of overuse . . . (especially for patients who have no one at home to care for them and must stay over long in a hospital), and

WHEREAS, C.P.S. does not provide this type of service; now, therefore, be it

Resolved: That C.P.S. provide home nursing, or convalescent, or home makers service, or home medical care and thus save money by caring for patients who otherwise would by necessity require prolonged, extensive hospitalization.

ACTION: Referred to Commission on Medical Services, Liaison Committee to C.P.S.

Resolution No. 7—See Resolution No. 3.

RADIODIAGNOSTIC CONSULTATIVE SERVICES

The C.P.S. Reference Committee determined that Resolution No. 8 and Resolution No. 22 were almost identical; the committee offered an amendment to one portion of both resolutions, to make them identical, and proposed the following:

Resolution No. 8.

Author: L. Henry Garland.
Representing: San Francisco Medical Society.

WHEREAS, the Federal civil service employees' health insurance programs will encompass a significant proportion of the practicing physicians' patient load; and

WHEREAS, the benefits to be received under these programs will be decided in part by physicians serving on the boards of bodies such as commercial health insurance carriers, California Physicians' Service and the like; and

WHEREAS, many voluntary health insurance programs do not provide realistic radiotherapy benefits, and do not provide radiodiagnostic consultative allowances; now, therefore, be it

Resolved: That this House suggest that governing bodies of California Physicians' Service and comparable health insurance groups provide adequate roentgen diagnostic consultative allowance, and radiation therapy benefits which will allow optimum treatment of the patient; and be it further

Resolved: That copies of this resolution be forwarded to California Physicians' Service, the Blue Cross organizations in this state and other appropriate bodies involved in the civil service employee's health insurance program.

ACTION: Adopted by House.

AMBULANCE DRIVERS TRAINING

Resolution No. 9.

Author: Delegates of the First District.
Representing: First C.M.A. District.

WHEREAS, Section 21714 of the California Vehicle Code has been enacted into law requiring ambulance drivers and attendants to be properly trained in first aid; and

WHEREAS, physicians recognize that good first aid at the scene of an accident, before the patient is moved, can be of utmost importance; and

WHEREAS, several county medical societies in California already have established effective training courses for ambulance personnel; now, therefore, be it

Resolved: That the Council of the California Medical Association be instructed to assist each county medical society in establishing a training course for ambulance drivers and attendants in cooperation with local chapters of the American Red Cross or the United States Bureau of Mines, or other qualified groups concerned with this subject.

ACTION: Adopted by House.

ANESTHESIOLOGISTS' FEES

Resolution No. 10.

Author: Carl E. Anderson.

Representing: Sonoma County Medical Society.

WHEREAS, the California Physicians' Service "B" Schedule has generally been accepted in this county for doctors' fees for patients with an income up to $6,000.00; and

WHEREAS, the fees provided for anesthesiologists under said Schedule are inadequate in relation to surgical and other fees under said schedule; and

WHEREAS, many anesthesiologists have resigned from California Physicians' Service because of these inequities; and

WHEREAS, anesthesiologists have accepted a $4.00 unit based on the California Medical Association's Relative Value Study for low income groups under programs sponsored by Foundations and other plans; now, therefore, be it

Resolved: That the House of Delegates of the California Medical Association instruct California Physicians' Service to review and establish anesthesiologists' fees in conformity with the Relative Value Study of the California Medical Association on an equitable basis.

ACTION: Adopted by House.

C.P.S. FEES FOR ASSISTANT SURGEONS

The C.P.S. Reference Committee considered Resolutions No. 11 and No. 12 together and offered the following substitute in lieu of both:

Resolution No. 11.

Author: W. H. Brignoli.

Representing: Napa County Medical Society.

Resolved: That the House of Delegates of the California Medical Association instruct California Physicians' Service to review and establish assistant surgeons' fees in conformity with the Relative Value Study of the California Medical Association on an equitable unit basis.

ACTION: Adopted by House.

Resolution No. 12—See Resolution No. 11, above.

CALIFORNIA PHYSICIANS' SERVICE

Resolution No. 13.

Author: Harold Batzle.

Representing: Riverside County Medical Association.

Resolved: That, believing that California Physicians' Service Schedule "A" contract is no longer practical for either the patient or the physician, and that because of this inadequacy this contract is now contributing to the irritation of all concerned, this House of Delegates recommends to the Trustees of California Physicians' Service that "Schedule A" be now formally abolished except for elderly retired people with incomes under $4,200, students and similar low income groups, and all groups now having this schedule shall be converted to a more practical program before 1963; and be it further

Resolved: That the "A" schedule should be revised to remove present inequities.

ACTION: Referred to Commission on Medical Services, Liaison Committee to C.P.S.

CALIFORNIA PHYSICIANS' SERVICE

Resolution No. 14.

Author: Harold Batzle.

Representing: Riverside County Medical Association.

Resolved: (1) That the House of Delegates recommends to the Board of Trustees of California Physicians' Service that California Physicians' Service immediately develop a certainty of coverage (service) contract based upon the "usual fee" concept without income ceiling or fixed fee schedule; premiums to be computed on an actuarially sound basis in each instance and within each county wherein the component medical society undertakes to assume the responsibility for determining and operating under the "usual, customary and reasonable" fee principle.

(2) California Medical Association shall join with California Physicians' Service in a continuing and intensive research program to develop new and dynamic types of medical-hospital insurance programs which will provide the public with a selection of desirable coverages that at the same time provide the physician with freedom to practice without stagnating restrictions.

ACTION: Adopted by House.

RELATIVE VALUE STUDY

Resolution No. 15.

Author: Los Angeles County Medical Association delegation.

ACTION: Not adopted by House.

COMPENSATION OF INTERNS, RESIDENTS

Resolution No. 16.

Author: Los Angeles County Medical Association delegation.

WHEREAS, the advances of Medical Science have made the adequate study of medicine an increasingly long and total time-consuming study; and

WHEREAS, the cost of providing and receiving this increasing knowledge becomes progressively greater; and

WHEREAS, the acquiring of a complete medical education defers for a considerable period economic compensation for the practice of medicine; and

WHEREAS, present fiscal and taxation policies of federal and local government make economic recovery from this financial attrition a difficult and long term struggle; now, therefore, be it

Resolved: That the California Medical Association undertake studies to determine, and action to implement a policy to achieve for interns and resident physicians a monetary compensation commensurate with the years of study, hours of work, and public benefit achieved by such individuals in all institutions approved for internship and residency training; and be it further

Resolved: That the C.M.A. Delegates to the A.M.A. be advised of such policy and instructed to put forth the utmost effort to make such a policy nation-wide in scope.

ACTION: Referred to Council.

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C.P.S. GOVERNMENT CONTRACTS

Resolution No. 17.

Author: Los Angeles County Medical Association delegation.

ACTION: Not adopted by House.

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C.P.S. POLICIES—UNIFORM DEDUCTIONS

Resolution No. 18.

Author: Lewis T. Bullock.

Representing: Los Angeles County Medical Association delegation.

WHEREAS, California Physicians' Service operates on a two visit deductible basis; and

WHEREAS, the cost of a visit to a doctor's office may vary widely, depending upon the character of the illness; and

WHEREAS, this variation in the amount the patient must pay is obviously unfair to a patient who happens to have an expensive initial visit; and

WHEREAS, this variation in the amount of coverage by policies with identical premiums is causing widespread dissatisfaction and criticism of C.P.S.; and

WHEREAS, such criticism of C.P.S. for unfair practices is harmful to the entire medical profession; and

WHEREAS, proper business and insurance principles require a uniform deduction on all policies with the same premium; therefore, be it

Resolved: That the California Physicians' Service be instructed to adopt a policy of making the amount to be deducted and paid by the patient the same on all policies of the same character and with the same premium.

ACTION: Adopted by House.

C.P.S. POLICY DECISIONS

Resolution No. 19.

Author: Los Angeles County Medical Association delegation.

ACTION: Not adopted by House.

' ' '

C.P.S. POLLS, SURVEYS, ETC.

Resolution No. 20.

Author: Los Angeles County Medical Association delegation.

ACTION: Not adopted by House.

' ' '

FEDERAL EMPLOYEES' INSURANCE

Resolution No. 21.

Author: Los Angeles County Medical Association delegation.

ACTION: Not adopted by House.

' ' '

Resolution No. 22—See Resolution No. 8.

Author: Los Angeles County Medical Association delegation.

' ' '

LEGISLATION RE: TISSUE RECORDS

Resolution No. 23.

Author: Los Angeles County Medical Association delegation.

WHEREAS, the purpose of Audit, Record and Tissue Committees of Hospital Staffs is to improve patient care; and

WHEREAS, other physicians' committees also exist to serve the public good; and

WHEREAS, in many instances the maximum benefit of such committees may be restricted because of the possibility of legal action resulting from such activities; now, therefore, be it

Resolved: That this House of Delegates of the C.M.A. urge the Commission on Public Policy of this Association to initiate legislation at the state level granting immunity from legal action for those transactions of doctors' committees acting in the public good.

ACTION: Referred to Council.

' ' '

CONTRACTUAL FEE AGREEMENTS

Resolution No. 24.

Author: Los Angeles County Medical Association delegation.

WHEREAS, it is the privilege and right of every individual doctor of medicine, after meeting the obligations imposed on him by state licensing law and the Principles of Medical Ethics, to decide for himself how he will practice his profession; and

WHEREAS, it is the privilege and right of every individual doctor of medicine to decide for himself whether or not to accept a fee offered as payment for his professional services; now, therefore, be it

Resolved: That the California Medical Association shall not contract with any person, firm or agency of any kind, with respect to the practice of medicine or to the fees for such practice, for any individual member or members of said association.

ACTION: Adopted by House.

SOCIO-ECONOMIC PUBLICATION

Resolution No. 25.

Author: Los Angeles County Medical Association delegation.

ACTION: Not adopted by House.

U.C.L.A. MEDICAL CENTER

Resolution No. 26.

Author: Los Angeles County Medical Association delegation.

ACTION: Not adopted by House.

CONFLICT OF INTEREST

Resolution No. 27.

Author: Los Angeles County Medical Association delegation.

ACTION: Not adopted by House.

SECTIONS—MEDICAL ECONOMICS

Resolution No. 28.

Author: William H. Thompson.
Representing: San Mateo County.

ACTION: Withdrawn by author.

SECTION CONVERSION FACTORS

Resolution No. 29.

Author: William H. Thompson.
Representing: San Mateo County.

WHEREAS, the basic principles as set forth in the Relative Value Study are sound; and

WHEREAS, private insurance companies, government agencies and California Physicians' Service continue to disregard the basic principle of nonuniformity of unit values between sections of the Relative Value Study; and

WHEREAS, disregard of this principle nullifies much of the value of the Relative Value Study and leads to certain inequities; now, therefore, be it

Resolved: That the California Medical Association make every effort to maintain this principle of nonuniformity of unit values between sections of the R.V.S. and not allow its subversion to an across-the-board unit value, particularly by C.P.S.; and be it further

Resolved: That the C.M.A., when authorized by this House of Delegates to use R.V.S. conversion factors in any negotiations, shall use only the individual conversion factors by sections.

ACTION: Adopted by House.

GEOGRAPHIC CONVERSION FACTORS

Resolution No. 30.

Author: William H. Thompson.
Representing: San Mateo County.

WHEREAS, the growth of private health insurance and the increasing use of tax funds for medical services has brought demands for state-wide uniform fee schedules; and

WHEREAS, medical services are purchased from individual physicians with wide variation in their cost of providing medical services; and

WHEREAS, it is therefore economically unfeasible for physicians of this state to abide by a single, statewide, uniform fee schedule; now, therefore, be it

Resolved: That the California Medical Association shall oppose the principle of state-wide uniform fee schedules; and be it further

Resolved: That the California Medical Association shall recognize geographic districts within which conversion factors shall be reported for the Relative Value Study and that only these conversion factors shall be used, when authorized by representatives of these districts, in negotiations with groups or agencies requesting information on the cost of medical services within this state.

ACTION: Adopted by House; referred to Commission on Medical Services.

C.P.S. CO-INSURANCE DEDUCTIBLES

Resolution No. 31.

Author: San Mateo delegation.

WHEREAS, C.P.S. does not now offer to the individual subscriber one, or several co-insurance deductible policies; and

WHEREAS, such policies are available through other insurance carriers to individuals as well as groups; and

WHEREAS, there appears to be a profound need for such coverage of individuals to permit treatment of serious illness where not several hundred, but several thousand dollars may be incurred in expenses; and

WHEREAS, such a deductible and co-insurance policy would diminish the frequency of procedures unnecessarily done in the hospital; and

WHEREAS, precedent has been set by other insurance carriers so that selling such a program to the public might be more feasible now than it was several years ago; now, therefore, be it

Resolved: That the C.M.A. direct the board of directors of C.P.S. to make another attempt to develop deductible policies and to offer on a pilot plan basis a choice of several such deductible plans such as $50, $100, or $150 deductible policy with a co-insurance payment of 10 to 25 per cent of the additional charges up to $5,000.

ACTION: Adopted by House.

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Resolution No. 32—See Resolution No. 4.

Author: San Mateo delegation.

* * *

SOCIETY NAME CHANGE

Resolution No. 33.

Author: Frank H. O'Neil.

Representing: Humboldt County Medical Society.

WHEREAS, the component society of the California Medical Association which is designated by the charter name Humboldt County Medical Society is incorporated under the laws of California as the Humboldt-Del Norte County Medical Society; and

WHEREAS, the designated society represents the members of both Humboldt and Del Norte Counties; and

WHEREAS, the members of Del Norte County do not in the foreseeable future desire to establish a separate county society; and

WHEREAS, certain legal technical difficulties arise from time to time from the discrepancy between the incorporated name and the C.M.A. charter name of the society; now, therefore, be it

Resolved: That the C.M.A. charter name of the Humboldt County Medical Society be changed so as to read, Humboldt-Del Norte County Medical Society.

ACTION: Adopted by House.

* * *

HOUSE OF DELEGATES MEETINGS

Resolution No. 34.

Author: San Mateo County.

WHEREAS, the California Medical Association presents a valuable scientific program in connection with its annual meeting; and

WHEREAS, the House of Delegates is made up of physicians, many of whom wish to attend or participate in the scientific program; and

WHEREAS, the present meetings of the House of Delegates on Sunday and Wednesday not only crowd the necessary deliberative processes of the House of Delegates between its meetings, but also make it impossible for most members of the House to benefit from or contribute to the postgraduate courses, section meetings, and other scientific fare provided; now, therefore, be it

Resolved: That this House of Delegates hold its first meeting on Saturday at the hour of 2 p.m. The second half of this meeting is to start at 9:30 a.m. Sunday. The second meeting of the House of Delegates shall be held at 9:30 a.m. Wednesday.

ACTION: Adopted by House.

* * *

H.R. 4700—FORAND BILL

Resolution No. 35.

Author: J. Lafe Ludwig.

Representing: Los Angeles County Medical Association.

WHEREAS, there is now pending before the Congress of the United States, H.R. 4700, 86th Congress, the Forand Bill, which would amend the Social Security Act so as to provide a federally subsidized program of hospital, nursing home and surgical service for persons eligible for Old-Age, Survivors' and Disability Insurance benefits; and

WHEREAS, the need for this program for O.A.S.D.I. beneficiaries has not been clearly established; and

WHEREAS, this program would not help the medically indigent as most of them are not eligible for social security benefits; and

WHEREAS, the financing of this proposed program would result in prohibitive public taxation; and

WHEREAS, voluntary health insurance is making rapid progress in providing health insurance for our senior citizens with expanded coverage and broader protection; and

WHEREAS, medical care is not susceptible to production line techniques such as would inevitably follow if this program were adopted; and

WHEREAS, this program would subject the patient, the doctor, and the hospital to government regulation; and

WHEREAS, this program would take away from the individual, his right to solve his own medical problems and to think and act for himself with respect to these problems; and

WHEREAS, this program would be the first irreversible step toward nationalizing medicine in this country; and

WHEREAS, medicine has made tremendous strides in a society based on the free-enterprise system; now, therefore, be it

Resolved: That the California Medical Association hereby opposes the enactment of H.R. 4700, 86th Congress; and be it further

Resolved: That this resolution be communicated to the members of the Senate and House of Representatives of the United States from California, to the chairman of the Committee on Ways and Means of the House of Representatives and to the President of the United States.

ACTION: Adopted by House.

' ' '

HOUSE JOINT RESOLUTION NO. 23

Resolution No. 36.

Author: J. B. Price.

Representing: Orange County.

WHEREAS, America's greatness is the product of a people's faith in constitutional law designed to protect the property and enterprise of each citizen from political invasion and confiscation; and

WHEREAS, attacks upon this principle have produced hundreds of federal corporate activities in conflict with the individual enterprises of the American people; and

WHEREAS, these federal corporate activities which operate without constitutional authority have taken over 40 per cent of the land area and 20 per cent of the industrial capacity of the nation, and directly and indirectly consume more than half the federal revenue to pay their losses and hidden costs; and

WHEREAS, the intent and purpose of the 9th and 10th Amendments to the Constitution was to prohibit governmental exercise of powers not specifically delegated to government by it; and

WHEREAS, the Fifth Article of the Constitution provides the means by which the people can delegate powers to, or withhold powers from government through an Amendment process requiring concurrence by two-thirds of the members of both Houses of Congress, or by the application of the Legislatures of two-thirds of the states, and to be ratified by three-quarters of the states; and

WHEREAS, at the present time there is now pending in the House of Representatives House Joint Resolution No. 23, which has already been approved by the states of Wyoming and Texas, which provides that:

"Section 1. The Government of the United States shall not engage in any business, professional, commercial, financial, or industrial enterprise except as specified in the Constitution.

"Section 2. The Constitution or laws of any state, or the laws of the United States, shall not be subject to the terms of any foreign or domestic agreement which would abrogate this amendment.

"Section 3. The activities of the U. S. Government which violate the intent and purposes of this amendment shall, within a period of three years from the date of the ratification of this amendment, be liquidated and the properties and facilities affected shall be sold.

"Section 4. Three years after the ratification of this amendment the sixteenth article of amendments to the Constitution of the United States shall stand repealed and thereafter Congress shall not levy taxes on personal incomes, estates, and/or gifts."

Now, therefore, be it

Resolved: That the House of Delegates of the California Medical Association go on record as approving and supporting House Joint Resolution No. 23; and be it further

Resolved: That a copy of this resolution be sent to members of both Houses of Congress from California and to members of the California State Legislature; and be it further

Resolved: That a similar type of resolution be presented by the California Medical Association Delegates to the American Medical Association House of Delegates for approval by that body.

ACTION: Referred to Council.

' ' '

HYPNOSIS

Resolution No. 37.

Author: J. E. Vaughan.

Representing: Kern County Medical Society.

WHEREAS, Hypnosis, an old medical tool, has been found recently to be very valuable in the treatment of many and varied disorders; and

WHEREAS, the use of Hypnosis for entertainment may cause physical as well as mental trauma to certain individuals; and

WHEREAS, the use of Hypnosis for entertainment degrades a useful medical tool; now, therefore, be it

Resolved: That the California Medical Association take a stand opposing the use of Hypnosis for entertainment purposes; and be it further

Resolved: That the California Medical Association shall encourage the introduction and passage of necessary legislation to prohibit this dangerous and improper use of Hypnosis.

ACTION: Referred to Council.

' ' '

ALTERNATE DELEGATES

Resolution No. 38.

Author: Santa Clara County delegation.

Representing: Santa Clara County.

WHEREAS, alternate delegates are rightly encouraged to fully participate in all phases of business

at county and district meetings as well as all other caucuses, but are incongruously segregated from their delegates on the floor of the House of Delegates; and

WHEREAS, it is believed that the intent of electing and sending alternate delegates to the regular sessions of the House of Delegates is to have them learn the important duties of a delegate by participation rather than by remote observation; and

WHEREAS, alternate delegates cannot adequately obtain proper training to eventually become responsible delegates unless they have the opportunity to constantly work at the sides of their delegates; now, therefore be it

Resolved: That alternate delegates be authorized to sit together with their delegates on the floor of the House of Delegates during the regular sessions.

ACTION: Adopted by House.

* * *

SMOG CONTROL

Resolution No. 39.

Author: C. G. Scarborough.
Representing: Santa Clara County Medical Society.

WHEREAS, "smog" is an increasing atmospheric problem in many of the more populous areas of California; and

WHEREAS, "smog" is a blot on our beautiful state obscuring its natural beauties and causing vast agricultural and industrial loss; and

WHEREAS, "smog" has conclusively been proven to be a health hazard attacking not only exposed nasal and ocular mucous membranes, but also aggravating pulmonary and bronchial disease present among our citizens; and

WHEREAS, improvement, at least in part, of most of the bronchopulmonary symptoms has been proven to be possible by isolation from "smog"; and

WHEREAS, such isolation is impossible, except by the use of highly expensive equipment facilities or by moving away from the urban areas; and

WHEREAS, such mass migration is impractical; and

WHEREAS, automotive exhausts with their atmospheric pollutants are among the major sources of "smog"; and

WHEREAS, experimental anti-"smog" exhaust devices are available; and

WHEREAS, use of such anti-"smog" devices on *all* automotive exhausts would practically eliminate this source of unhealthful "smog"; and

WHEREAS, more research and action along these lines is a health "must" for California; and

WHEREAS, the State Department of Public Health has now established maximum permissible air pollution standards; now, therefore, be it

Resolved: That the C.M.A. hereby recognizes the health hazards of "smog" and instructs the council to press for appropriate legislation aiming at limitation of air pollution, from whatever sources; and be it further

Resolved: That the members and Council of C.M.A. cooperate with the State Health Department in its efforts to control "smog" and with any Smog Control Agencies in their enforcement efforts.

ACTION: Adopted by House.

* * *

FALL-OUT SHELTERS

Resolution No. 40.

Author: Edward Liston.
Representing: Santa Clara County.

WHEREAS, there is no known defense against the direct effects of atomic bomb-strike; and

WHEREAS, very effective defense against the effects of blast, heat and fall-out radiation is possible; and

WHEREAS, the country with the highest percentage of survivors will be the so-called victor in any atomic conflict; and

WHEREAS, the efforts of the American people to provide for their personal survival have been negligible; and

WHEREAS, the public apathy is of great concern to the medical profession which has some appreciation of the consequences of an atomic holocaust; and

WHEREAS, while government has given endless warnings and excellent advice, it has given no concrete incentive to the public to provide fall-out shelters for their own protection; now, therefore, be it

Resolved: That the C.M.A. urges immediate legislation at all governmental levels which will provide strong economic motivation for the construction and maintenance of fall-out shelters.

Such legislation to provide:

1. All costs of construction and maintenance of approved shelters shall be deductible from the income tax of individuals and taxpaying organizations.

2. The full costs of construction of approved shelters shall be deducted from the tax appraised value of the property on which they are constructed.

3. Low interest loans shall be made available to individuals and organizations for the construction of such shelters.

4. The above incentives shall apply also to the remodeling or insulation against radiation of existing structures.

5. The above economic benefits shall not be denied because such shelters may be suitable for other purposes.

6. A special bonus shall be paid for specially constructed shelters which provide protection against atomic, bacteriological and chemical attack.

ACTION: Referred to Council.

COMPULSORY RETIREMENT

Resolution No. 41.

Author: Eugene M. Webb.

Representing: San Francisco Medical Society.

WHEREAS, compulsory retirement at the age of 65 precludes the desire and privilege of continuing employment, impairs physical and mental health, and impairs the economy; now, therefore, be it

Resolved: That the House of Delegates of the C.M.A. place itself on record as being opposed to the policy of compulsory retirement, and the Council be directed to take any and all appropriate steps to expedite such a position.

ACTION: Adopted by House.

C.M.A. POSTGRADUATE EDUCATION

Resolution No. 42.

Author: Edgar Wayburn.

Representing: San Francisco Medical Society.

WHEREAS, the present system of postgraduate education at C.M.A. conventions prevents the participation of the membership in both the scientific and business sessions of the C.M.A.; and

WHEREAS, the attendance and caliber of the scientific and business sessions should be increased in accord with the size and prestige of the C.M.A.; now, therefore, be it

Resolved: That the C.M.A. Committee on Scientific Work be requested NOT to schedule any postgraduate teaching courses during the annual C.M.A. session.

ACTION: Referred to ad hoc Committee on Scientific Activities.

COMMENDING DOCTOR WILBUR

Resolution No. 43.

Author: Charles W. Leach.

Representing: San Francisco Medical Society.

WHEREAS, it is well recognized that CALIFORNIA MEDICINE is a most valuable and useful publication; and

WHEREAS, its editorial standards have not been exceeded by any state medical journal; now, therefore, be it

Resolved: That the House of Delegates of the California Medical Association present Dr. Dwight Wilbur, Editor of CALIFORNIA MEDICINE, with a Certificate of Distinguished Service to the C.M.A.

ACTION: Adopted by House.

WORLD MEDICAL ASSOCIATION

Resolution No. 44.

Author: Forrest M. Willett.

Representing: San Francisco Medical Society.

WHEREAS, the World Medical Association is the only international medical organization representing the practicing profession in the fields of medical socio-economics, medical science and medical education and devoted to protection of the freedom of practice of medicine; and

WHEREAS, funds from individual members are desperately needed to support this program; now, therefore, be it

Resolved: That the House of Delegates of the C.M.A. affirm its support of the World Medical Association and recommend that every member of the C.M.A. join the U. S. Committee of the World Medical Association; and be it further

Resolved: That the component county associations be urged to support and give official recognition to the officers and subcommittees of the U. S. Committee in order to achieve the objectives of the World Medical Association in protecting the freedom of medical practice and increasing the influence of the practicing medical profession at the international level

ACTION: Adopted by House.

HOSPITALIZATION FOR DIAGNOSIS

Resolution No. 45.

Author: Charles W. Leach.

Representing: San Francisco Medical Society.

WHEREAS, there are many acute and subacute medical problems which require prompt diagnosis; and

WHEREAS, many of these problems are best investigated in a hospital because of both time and safety factors; and

WHEREAS, such hospitalizations are frequently denied by C.P.S. because of an exclusion clause; now, therefore, be it

Resolved: That C.P.S. should study the possibility of providing hospitalization for diagnostic purposes at an appropriate premium.

ACTION: Adopted by House.

* * *

DIAGNOSTIC TESTS

Resolution No. 46.

Author: Charles W. Leach.
Representing: San Francisco Medical Society.

WHEREAS, patients are sometimes hospitalized for minor conditions to take advantage of C.P.S. coverage of procedures done in a hospital; and

WHEREAS, this constitutes a waste of hospital facilities and C.P.S. funds; now, therefore, be it

Resolved: That C.P.S. provide payment for necessary diagnostic tests and procedures whether done in or out of a hospital for those contracts not now covered.

ACTION: Adopted by House.

* * *

EARLY PAYMENT OF PREMIUMS

Resolution No. 47.

Author: Eugene M. Webb.
Representing: San Francisco Medical Society.

WHEREAS, the cost of hospital and medical care for the aged tends to be higher than for other groups; and

WHEREAS, the economic position of some of this group is relatively poor; now, therefore, be it

Resolved: That the House of Delegates of the C.M.A. urge leaders of industry, labor and insurance carriers to develop a countrywide health insurance plan, the premiums of which will be paid during working years and the benefits of which will remain in force after retirement, and that the C.M.A. delegates to the A.M.A. be instructed to present a similar resolution to A.M.A.

ACTION: Referred to Commission on Medical Services.

* * *

MEDIATION COMMITTEES

Resolution No. 48.

Author: Eugene S. Hopp.
Representing: San Francisco Medical Society.

WHEREAS, there has been confusion in the interpretation of the working of major medical expense (catastrophic) insurance policies; and

WHEREAS, this has led to misunderstandings among patients, physicians and insurance companies; and

WHEREAS, county medical societies have Insurance Mediation Committees for the specific purpose of arbitrating such matters; now, therefore, be it

Resolved: That the Council of the C.M.A. be directed to inform the Health Insurance Council of the existence of such committees and the desirability of referring these problems to them.

ACTION: Referred to Council.

* * *

PUBLIC HEALTH LEAGUE

Resolution No. 49.

Author: A. Justin Williams.
Representing: San Francisco Medical Society.

WHEREAS, the Public Health League is most effective in its work for the medical profession; and

WHEREAS, many physicians do not adequately support this fine organization; now, therefore, be it

Resolved: That the California Medical Association urge its component societies to cooperate with and to support the Public Health League.

ACTION: Adopted by House.

* * *

PUBLIC RELATIONS

Resolution No. 50.

Author: Malcolm S. M. Watts.
Representing: San Francisco Medical Society.

WHEREAS, many physicians believe and various studies have shown that the goals, purposes and accomplishments of the medical profession with regard to scientific, socio-economic and political developments in the field of medical care are poorly understood by the public; and

WHEREAS, greater public understanding and support are necessary if the best medical practice is to survive and continue to serve the public; and

WHEREAS, an effective public relations program is the best insurance that the purposes and performance of the medical profession will be understood and appreciated by the people of our state; now, therefore, be it

Resolved: That the C.M.A. activate its program to expand and accelerate public relations through the C.M.A. Public Relations Committee.

ACTION: Adopted by House.

* * *

C.P.S. MEDICAL COVERAGE

Resolution No. 51.

Author: Edgar Wayburn.
Representing: San Francisco Medical Society.

WHEREAS, the basic plans of coverage for C.P.S. were promulgated at its founding in 1938 and have

not been altered to any appreciable extent since then; and

WHEREAS, there are constant alterations in medical practice due to scientific advances; and

WHEREAS, different groups of medical specialists, including radiologists, anesthesiologists, psychiatrists and internists are urging that C.P.S. coverage be widened to keep pace with medicine's rapid changes; and

WHEREAS, C.P.S. properly should reflect these changes; now, therefore, be it

Resolved: That a committee be appointed to act as a liaison committee between the Medical Services Commission and C.P.S. and to review the medical coverage of C.P.S. contracts so that it can lead the way in furnishing the most medically advanced and adequate coverage as it did in its pioneer medical insurance; and be it further

Resolved: That this committee be empowered to make recommendations on all contracts and renewals, to be acted upon by the C.P.S. Board of Trustees, and to report annually to the House of Delegates.

ACTION: Adopted by House.

BLOOD FRACTIONS

Resolution No. 52.

Author: Robert L. Dennis.
Representing: Santa Clara County.

WHEREAS, the number of units of blood collected by any blood bank through a given period of time must be in excess of the number of units of blood used in order that a sufficient supply of the various groups and Rh types will be constantly at hand; and

WHEREAS, blood may be preserved for only 21 days from its date of drawing and then becomes outdated and useless as whole blood; and

WHEREAS, these unavoidable conditions render large quantities of blood useless unless the plasma is separated from the cell mass and is converted into usable fractions or is made fit to be preserved and used as whole plasma; and

WHEREAS, such outdated plasma must be sent to commercial laboratories either in the State of California or out of the state for necessary preparation and fractionation at considerable expense to the blood banks of origin and eventually to the people who will use such products; and

WHEREAS, most blood acquired by the blood banks has been given by the people without recompense at the request of the medical profession; and

WHEREAS, the members of the medical profession are keenly aware of the constantly rising cost of living and of services in all levels of life and strives to offer the best possible medical service at the lowest possible cost; now, therefore, be it

Resolved: That the House of Delegates of the California Medical Association authorize and direct the Council of the California Medical Association to arrange for and cause to be performed a study of the feasibility of setting up a laboratory whereby all authorized blood banks in the State of California may have their outdated blood plasma treated or fractionated to the end that the products of outdated blood, including various testing sera, may be returned to the referring blood banks and be made available to the people at no cost other than the cost of its transportation and the services rendered in its preparation; and be it further

Resolved: That a report be given to this House of Delegates on its findings and recommendations in the above matter at its next annual session.

ACTION: Adopted by House.

NURSING SHORTAGE

Resolution No. 53.

Author: Leon P. Fox.
Representing: Santa Clara County.

WHEREAS, the shortage of registered nurses in California is appalling and progressive; and

WHEREAS, the Standard Hospital Diploma Schools, our best source of good bedside nurses, are diminishing in numbers; and

WHEREAS, the new collegiate degree programs have not yet proven their adequacy to replace the hospital school in quality or quantity; and

WHEREAS, the upgraded standards in nursing training have made educational costs in hospitals prohibitive; now, therefore, be it

Resolved: That the Council instruct the Committee on Other Professions to conduct an adequate survey of the Hospital Diploma Schools in California to determine if financial aid could preserve the remaining schools; and be it further

Resolved: That the possibility of establishing and sponsoring a Nursing Education Foundation, simulating the American Medical Education Foundation, be investigated; and be it further

Resolved: That the results of this survey and investigation be reported back to the House of Delegates of C.M.A. in 1961.

ACTION: Adopted by House.

REPORTING OF EPILEPSY

Resolution No. 54.

Author: Santa Clara delegation.

WHEREAS, epilepsy by law is reportable by physicians to the State of California Department of Public Health; and

WHEREAS, this reported information is automatically forwarded to the State Motor Vehicle Department, resulting in suspension of the epileptic's drivers' license, despite the fact that the report to the Health Department is made on forms titled: "*Confidential* Morbidity Report"; and

WHEREAS, the reporting of this condition is totally discriminatory, since no other illness, including alcoholism, resulting in loss or lapse of consciousness is reportable; and

WHEREAS, the reporting of this condition by the physician results in distrust of the physician by the patient, leading to loss of rapport and poor control of the patient's spells and thereby to greater hazard to the patient and society on or off the highways; and

WHEREAS, it seems reasonable and is ethical for the physician to report on the health of patients to the Motor Vehicle Department *only* with prior written authorization from the patients; and

WHEREAS, at the present time physicians are reluctant to report epilepsy; and

WHEREAS, it seems unjust to legally force physicians to initiate the exposure of patients' handicaps, the result of which leads to the patients being penalized, when it is evident that the Motor Vehicle Department could and should accomplish the same end without incriminating physicians as instigators of the process; now, therefore, be it

Resolved: That the Traffic Safety Committee of the California Medical Association be directed to undertake a study of methods and to develop proposals whereby all medical conditions, including epilepsy, resulting in potential inadequate control of motor vehicles can be dealt with administratively on an equitable, nondiscriminatory basis for the purpose of improving safety conditions on California highways; and be it further

Resolved: That the C.M.A. Council take steps to make it mandatory that the Motor Vehicle Department obtain current specific authorizations from patients before having access to confidential medically reported conditions.

ACTION: Adopted by House.

POSTGRADUATE EDUCATION

Resolution No. 55.

Author: Carl E. Anderson.

Representing: Sonoma County.

WHEREAS, a recently vacated Medical Educational Institution and Teaching Hospital is now in progress of redevelopment in San Francisco; and

WHEREAS, the nonprofit philanthropic agency now in tenancy has publicly announced the intention to develop a program of Postgraduate Education and other Public Medical Services; and

WHEREAS, Postgraduate Medical Education and Para-medical Personnel Training Programs are a primary responsibility of organized medicine to foster and perpetuate; and

WHEREAS, these two projects will require both financial and consultative assistance for widest and most effective development through the efforts of the Committee on Postgraduate Activities and the officers and Council of the California Medical Association; now, therefore, be it

Resolved: That the House of Delegates of the California Medical Association in convention do assign and allocate funds sufficient for preliminary study and investigation of ways, means and mode of assisting these laudable and essential medical educational projects, thereby insuring an increasing supply of trained personnel and continuous provision for clinical technical advances through "in-hospital" and other medical postgraduate education.

ACTION: Referred to* ad hoc *Committee on Scientific Activities.

* * *

WELFARE DRUG LIST

Resolution No. 56.

Author: Edward Liston.

Representing: Santa Clara County Medical Society.

WHEREAS, the drug list provided for the California Public Assistance Program for recipients of Old Age Security and Aid to the Blind is inadequate in the following respects:

1. It provides less than 50 drugs which might possibly be prescribed for use by mouth;

2. It provides less than 15 drugs which can be used by injection;

3. It prohibits commonly used combinations such as paregoric and bismuth or salicylates with codeine.

4. It provides some rarely used drugs and some drugs used for highly specialized purposes only but

provides almost none of the standard drugs used for the alleviation of the minor ills of the aging;

5. It provides:

a. No salicylates
b. No antihistamines
c. No laxatives
d. No lotions
e. No ointments
f. No antacids
g. No antipruritic
h. No potassium salt
i. No ammonium chloride
j. No suppositories
k. No cough mixture
l. No urinary antiseptic except gantrisin
m. No Dramamine or other similar drug
n. No pyridium or other similar drugs
o. No medication for preventive care of the skin
p. No barbiturates except phenobarbital and nembutal
q. No chloral or other nonbarbituratic hypnotics
r. No diabetic test supplies.

6. Its main effect is to reduce the cost of drugs to an absolute minimum inconsistent with the aims of the program which is to provide adequate medical care for the recipients; and

WHEREAS, In the public mind the cost of drugs is associated with the physicians' services; and

WHEREAS, The cost of drugs under OAS in indeed an important item and amounted to more than the cost of physicians' services provided under OAS; and

WHEREAS, a committee, in existence, has as its function the constant revision of the drug list and the solution of other problems relative to drugs; now, therefore, be it

Resolved: That the present difficulties outlined in the first *Whereas* be referred to the Liaison Committee to the State Department of Social Welfare for study and action; and be it further

Resolved: That attempts be made to disassociate in the minds of all concerned the cost of drugs from the cost of physicians' services under the OAS program.

ACTION: Adopted by House.

C.P.S. INCOME CEILING FEES

Resolution No. 57.

Author: Alameda-Contra Costa.

WHEREAS, the only statewide fee schedule available to California Physicians' Service for sale to large groups and industries which are statewide in location is the inadequate, outmoded and unrealistic "A" Schedule under the $4,200 income ceiling; and

WHEREAS, the absence of unified and decisive statewide instruction regarding a realistic fee level from California doctors to California Physicians' Service may jeopardize the participation of the profession and California Physicians' Service in the provision of health insurance benefits to Federal Employees in our state, and other statewide industries which purchase prepaid health plans; and

WHEREAS, California Physicians' Service must continue to be responsive to the needs of the public in the economics of medicine, as expressed through its close relationship to the doctors of California; and

WHEREAS, the leadership of California Physicians' Service in the provision of health insurance to California citizens in a manner prescribed by doctors results in the availability to the public of more adequate, more flexible, more comprehensive coverage from other insurance carriers; now, therefore, be it

Resolved: That this House instruct California Physicians' Service to provide to the public of California a statewide health insurance contract based upon the Relative Value Survey with a value of five dollars per unit, and with a family income ceiling of $7,200 per annum to enable C.P.S. to acquire approximately 10 per cent of the health insurance coverage in California and to remain a guiding influence in the development of prepayment health plans in this country.

ACTION: Referred to Commission on Medical Services, Liaison Committee to C.P.S.

INSURANCE PREMIUM TAX

Resolution No. 58.

Author: Alameda-Contra Costa.

WHEREAS, the State of California presently collects a premium tax of 2.35 per cent on health insurance premiums sold in California; and

WHEREAS, there is much public interest in making available to persons over age 65 health insurance at the most economical possible premium rate; now, therefore, be it

Resolved: That this House, through the Council of the C.M.A., urge the State of California to consider the public advantage to be derived from foregoing the premium tax on any health insurance policies sold by any insurance company to California residents over the age of 65.

ACTION: Adopted by House.

HEALTH INSURANCE FOR ELDERLY

Resolution No. 59.

Author: Alameda-Contra Costa.

WHEREAS, direct purchase of health insurance from private insurance carriers, Blue Shield and Blue Cross, would provide a solution to the medical economic problems of elderly needy persons while fostering continued progress with no violent upheaval in current developments in health insurance; now, therefore, be it

Resolved: That the C.M.A. urge, that should the federal government see fit to appropriate additional funds for the health care of the needy elderly, that these funds be channeled into the purchase of prepaid health insurance from private carriers, Blue Shield and Blue Cross, and that these programs be utilized and designed with the leadership and guidance of the medical profession and distributed on a state and local level.

ACTION: Adopted by House.

' ' '

RELATIVE VALUE SURVEY

Resolution No. 60.

Author: Alameda-Contra Costa.

WHEREAS, the California Medical Association's Relative Value Survey is widely used and accepted by insurance carriers, labor health and welfare plans and physicians as an instrument from which equitable and appropriate fee schedules can be developed; and

WHEREAS, the Relative Value concept has been recognized nationally as a pioneering step in medical economics; and

WHEREAS, the Relative Value Survey is of value to counties attempting to solve problems of medical economics; now, therefore, be it

Resolved: That this House continue to encourage the work of the committees concerned with the management and constant revision of the Relative Value Survey; and be it further

Resolved: That this House desires that the California Medical Association Council encourage production and distribution of the latest edition of the Relative Value Survey in the shortest possible time.

ACTION: Adopted by House.

' ' '

INSTRUCTION OF HEALTH EDUCATORS

Resolution No. 61.

Author: Alameda-Contra Costa.

WHEREAS, the Education Code of the State of California *requires* that students in elementary schools shall receive instruction in "healthful living"; and

WHEREAS, the Education Code of the State of California *requires* as part of this "training in healthful living" instruction in accident prevention, public safety, fire prevention, and in the nature of alcohol and narcotics and their effects upon the human system; and

WHEREAS, all teachers at the elementary and secondary levels have additional responsibilities relating to the health of school children including general health instruction and activities concerned with health services; and

WHEREAS, research reveals that teachers in these areas are generally inadequately prepared to function effectively in the school health education program; now, therefore, be it

Resolved: That the C.M.A. recommends that those preparing to become teachers in the elementary and secondary schools be given appropriate material and instruction in the techniques of presenting health education; and be it further

Resolved: That the Council of the C.M.A., through the Committee on School Health, advise the State Superintendent of Instruction of our willingness to help in the preparation of this material.

ACTION: Adopted by House.

' ' '

WORKMEN'S COMPENSATION

Resolution No. 62.

Author: Alameda-Contra Costa.

WHEREAS, it is apparent that in the administration of Workmen's Compensation there exists an emphasis on payment for injuries and disability as opposed to rehabilitation; and

WHEREAS, such emphasis creates problems in the speedy recovery of such patients; now, therefore, be it

Resolved: That the California Medical Association vigorously promote the concept that the funds expended under the Workmen's Compensation Act are most productive when used to defray the costs of maximum rehabilitation rather than to provide prolonged weekly payments for injuries and disability; that the California Medical Association instruct the Commission on Medical Services to study the problem for appropriate action.

ACTION: Adopted by House.

' ' '

SENIOR CITIZENS

Resolution No. 63.

Author: Ian Macdonald.

ACTION: Not adopted by House.

C.P.S. LIMITATION

Resolution No. 64.

Author: E. H. Crane, Jr.

ACTION: Not adopted by House.

' ' '

CODE OF INSURANCE STANDARDS

Resolution No. 65.

Author: August J. Haschka, Jr.

Representing: Los Angeles County Medical Association.

WHEREAS, mass subscription to prepaid health insurance programs has gained wide acceptance; and

WHEREAS, the insurance industry has become a major third party influence in the traditional relationship between patient and physicians; and

WHEREAS, health insurance programs vary widely in both their limits of coverage and in their accordance with the established principles and objectives of the medical profession; and

WHEREAS, some programs operate in the best interest of the policyholder, advance the general health standards of the community and are in harmony with the established principles and objectives of the medical profession; and

WHEREAS, other programs fail to operate in the best interest of the policyholder, lower the health standards of the community, violate the physician-patient relationship, conflict with the established principles and objectives of the medical profession, and tend to place the physician in a position of subordination to the insurance contract carrier; and

WHEREAS, policyholders often do not comprehend the technical limitations of their contracts, thereby leading to frequent misunderstanding and grievance between policyholder, contract carrier and the attending physician; and

WHEREAS, it is a proper function of the medical profession to be in a position to advise and guide the public in selecting sound medical insurance programs; now, therefore, be it

Resolved: That the Commission on Medical Services be instructed to study the feasibility of developing a code of medical and ethical standards which could serve as a basis for a continuing evaluation of all medical insurance programs sold in the State of California; and be it further

Resolved: That if this study shows such a code can be devised and that it will serve in the best interest of the public and medical profession, this committee will then formulate such a code of medical and ethical standards which, upon acceptance by the C.M.A. Council, will serve as a basis for evaluating all medical insurance programs voluntarily submitted to the California Medical Association for this purpose; and that this code and evaluation be employed by the California Medical Association and its component societies, upon its acceptance, in any manner compatible with the best interests of the public and the medical profession.

ACTION: Adopted by House.

' ' '

NURSING STANDARDS

Resolution No. 66.

Author: J. Philip Sampson.

WHEREAS, the Committee on Other Professions now has members on the Advisory Council to the Board of Nurse Examiners, the Advisory Committee of the California Associate in Arts Nursing Project, the State Coordinating Committee on Nursing Education, the Committee on Evaluation of the Two-Year Program in Nursing; and

WHEREAS, this committee has met with the California State Nurses' Association, the National League for Nursing and the California League for Nursing, for the purpose of discussing programs of the Junior-Community College Education for Nursing; and

WHEREAS, this committee has recommended to the Advisory Council to the Board of Nurse Examiners that the highest legal standards of nurses' training be instituted in the two-year courses and that this standard of nurses' training and education be not lower than the present standards adopted by the Board and inasmuch as the Advisory Council adopted this recommendation unanimously; now, therefore, be it

Resolved: That the California Medical Association assure the Advisory Council to the Board of Nurse Examiners, the State Coordinating Committee on Nursing Education, the Advisory Committee of the California Associate in Arts Nursing Project, the Committee on Evaluation of the Two-Year Program in Nursing, that they are deeply concerned with the education and training of nurses and will support programs that raise the standards and practice of nursing in the State of California.

ACTION: Adopted by House.

' ' '

PROFESSIONAL LIABILITY

Resolution No. 67.

Author: Malcolm C. Todd.

WHEREAS, the number of all type liability claims against the many professions licensed in the State of California have been increasing each year; and

WHEREAS, the judgment asked in professional liability claims against members of our profession becomes higher and higher; and

WHEREAS, every alleged case is not "Practice conducted in a careless, reckless and negligent manner"; and

WHEREAS, there is necessarily a difference between malpractice and "poor result"; now, therefore, be it

Resolved: That the California Medical Association instruct its legislative committee to work toward the introduction of Legislation in the State Assembly to the effect that plaintiff's attorneys must post $2,500 bond in order to file a professional liability suit in the State of California so as to cover fees, court costs, etc.

ACTION: Approved and referred to Liaison Committee to State Bar of California.

UNIT VALUE OF HOUSE CALLS

Resolution No. 68.

Author: Malcolm C. Todd.

WHEREAS, the California Medical Association is constantly striving for good public relations; and

WHEREAS, public relations are best maintained by close harmony between the patient and physician; and

WHEREAS, physician's house calls to the home of a patient will always be necessary for certain illnesses; and

WHEREAS, house calls are a service to the public and economically of nonprofitable value to the physician; and

WHEREAS, the Relative Value Study in the State of California allows only 1.5 units for a house call; now, therefore, be it

Resolved: That in order to prevent repeated small breaks in good public relations, the Relative Value scales of all approved C.M.A. programs provide for a minimum of two (2) units for each house call and three (3) units for each call after 11:00 p.m.

ACTION: Referred to Commission on Medical Services.

MENTAL ILLNESS LEGISLATION

Resolution No. 69.

Author: Donald D. Lum.

Representing: C.M.A. Council.

WHEREAS, Senate Constitutional Amendment Number Three introduced by Senator Dilworth on January 26, 1959, professes to protect the rights of mentally ill persons by providing for court action in every case of confinement for mental illness or mental deficiency; and

WHEREAS, this procedure puts such cases in the category of treatable illnesses; and

WHEREAS, the delay in therapy of such cases attendant upon this protracted legal process could jeopardize the safety and welfare of both the disturbed patient and other members of society; now, therefore, be it

Resolved: That the California Medical Association oppose the passage of this amendment and urge that a more reasonable and less hazardous procedure be developed for protection of the rights of the mentally ill with due consideration of the fact that existing legislation does in fact provide reasonable safeguards against injustice in such matters.

ACTION: Adopted by House.

SOCIAL SECURITY

Resolution No. 70.

Author: S. Fred Kaufman.

Representing: Santa Clara County.

WHEREAS, there is now pending in the Congress of the United States proposed legislation known as H.R. 10 (Keogh-Simpson Bill) to amend the tax laws to allow a measure of equality to the self-employed so that they may establish individual retirement programs similar to the tax plan that grants tax deferment and retirement benefits to employees of corporations; and

WHEREAS, the American Thrift Assembly is actively engaged in representing farm, small-business and professional self-employed to secure passage of this proposed legislation; now, therefore, be it

Resolved: That the California Medical Association recommends passage of the Keogh-Simpson Bill and actively endorses and helps to support the objectives of the American Thrift Assembly by appropriate financial assistance and with appropriate personnel assistance in such amounts and to such extent as deemed advisable by the Council of the C.M.A.

ACTION: Adopted by House.

RADIOTHERAPY BENEFITS

Resolution No. 71.

Author: Tenth District delegation.

WHEREAS, the federal civil service employees' health insurance programs will encompass a significant proportion of the practicing physicians' patient load; and

WHEREAS, the benefits to be received under these programs will be decided in part by physicians serving on the boards of bodies such as commercial health insurance carriers, California Physicians' Service and the like; and

WHEREAS, many voluntary health insurance programs do not provide realistic radiotherapy benefits, and do not provide radio-diagnostic consultative allowances; now, therefore, be it

Resolved: That this House requests that governing bodies of California Physicians' Service and comparable health insurance groups correct these deficiencies during the twelve-month period subsequent to the date of adoption of this resolution; and, be it further

Resolved: That copies of this resolution be forwarded to California Physicians' Service, the Blue Cross organizations in this state and other appropriate bodies involved in the civil service employees' health insurance program.

ACTION: Adopted by House.

UNMET MEDICAL CARE NEEDS

Resolution No. 72.

Author: Tenth District delegation.

WHEREAS, government direction and control of medical care is accomplished primarily through economic mechanisms; and

WHEREAS, purported or real unmet medical care needs are the prime instruments through which economic control of medicine is obtained; and

WHEREAS, the California Medical Association is the most logical organization to recognize and seek solutions of such unmet needs; and

WHEREAS, efforts by local medical societies and other groups to meet unmet medical needs on a local level have either failed or at least have been only partially successful, and, at the same time have created disunity within the profession and criticism from without; therefore, be it

Resolved: That the Bureau of Research and Planning or a committee designated by the C.M.A. Council be instructed to continue its efforts to the end that we will:

1. Organize and conduct research in the field of unmet medical needs in California.

2. Initiate research in the field of the marketing of medical care in an effort to establish new methods suitable to the needs discovered.

3. Recommend standards and principles applicable to such developed marketing methods (Foundation, co-insurance, etc.), acceptable to the C.M.A. House of Delegates.

ACTION: Adopted by House.

RELATIVE VALUE STUDY REVISION

Resolution No. 73.

Author: Robb Smith.

Representing: Fresno County.

WHEREAS, the Relative Value Study has proven to be a useful implement to individual physicians in the private practice of medicine; and

WHEREAS, it has been an equally forceful implement in various component county society health insurance activities, in particular the Foundation for Medical Care Programs; and

WHEREAS, it is desirable to have it up-to-date so as to reflect current medical methods and existing economic trends; therefore, be it

Resolved: That the Committee on Fees be directed to expedite their present study and revision of the Relative Value Study to provide members of the California Medical Association with a revised Relative Value Study reflecting current data.

ACTION: Adopted by House.

READING OF RESOLUTIONS

Resolution No. 74.

Author: Leon P. Fox.

Representing: Santa Clara County.

WHEREAS, the American Medical Association House of Delegates recognizes the reading of the "Resolve" portion of all resolutions on the floor of the House; and

WHEREAS, it is pertinent that all resolutions be given equal consideration prior to assignment to reference committees; and

WHEREAS, authors of resolutions should be given the privilege to personally identify themselves verbally and emphasize their viewpoints themselves, therefore, be it

Resolved: That the resolved portion of all resolutions be read on the floor of the House of Delegates and the author identified at the Annual Session if so requested by the author.

ACTION: Referred to Speaker of House of Delegates.

C.P.S. FEE SCHEDULES

Resolution No. 75.

Author: Clyde L. Boice.

Representing: Santa Clara County.

WHEREAS, C.P.S. fills an existing and future need in the field of voluntary health insurance; and

WHEREAS, C.P.S. must keep pace with an expanding and inflationary economy; and

WHEREAS, a service plan under the control of physicians is superior to health insurance sold by private companies, with no physician control; now, therefore, be it

Resolved: That C.P.S. be directed to study the feasibility of providing a "D" schedule, using the Relative Value Study with a conversion factor of $6.00, and having an $8,500 income ceiling.

ACTION: Referred to Commission on Medical Services, Liaison Committee to C.P.S.

C.P.S. CEILINGS

Resolution No. 76.

Author: George Houck.

Representing: Santa Clara County.

WHEREAS, approximately 30 per cent of the families in California have an income above $7,500 per year; and

WHEREAS, approximately 10 per cent of the families in California have an income above $10,000 per year; and

WHEREAS, the determination of this patient's "income ceiling" by the physician is frequently a source of patient dissatisfaction; and

WHEREAS, policies with an "income ceiling" have less appeal to the patient and are less salable; and

WHEREAS, the accounting resulting from inclusion of an "income ceiling" results in considerable administrative expense; therefore, be it

Resolved: That C.P.S. be directed to study the feasibility for possible future use of providing a schedule of insurance using the Relative Value Study with a conversion factor of 5.50 or more, with no exclusion on account of income.

ACTION: Referred to Commission on Medical Services, Liaison Committee to C.P.S.

PHYSICIANS' PLACEMENT SERVICE

Resolution No. 77.

Author: Carl Anderson.

Representing: Sonoma County.

WHEREAS, the California Medical Association has a responsibility in aiding new physicians who wish to locate in California; and

WHEREAS, the Placement Service of the California Medical Association has assisted hundreds of new physicians in finding locations where they are most needed; and

WHEREAS, this service, given without charge, is of great value to physicians looking for an association as well as physicians who need an associate in their practice; therefore, be it

Resolved: That the House of Delegates of the California Medical Association commend the Physician Placement Service for its activities and encourage its further development.

ACTION: Adopted by House.

SOCIO-ECONOMIC POLICY

Resolution No. 78.

Author: L. A. Alesen.

Representing: Los Angeles County.

ACTION: Not adopted by House.

In addition to the numbered resolutions, the House of Delegates received four emergency resolutions at its final meeting. All four were adopted by unanimous vote. They were as follows:

RETIRING OFFICERS

Author: John G. Morrison.

WHEREAS, Dr. T. Eric Reynolds has outspokenly defended the progress of medicine and the best interest of the public, furnishing to his colleagues leadership of the highest order, and wise counsel and unselfish sacrifice in office of trust and leadership in his county, state, and national medical associations; and

WHEREAS, Dr. Donald Lum has rendered to the doctors of California many years of imaginative and constructive leadership, and has in that time endeared himself to his colleagues everywhere for his good humor, his intelligence, his ready affability and friendship, his integrity and devotion to work in behalf of all doctors and the California Medical Association; and

WHEREAS, both of these distinguished members of the Alameda-Contra Costa Medical Association relinquish their offices of President of the California Medical Association and Chairman of the Council of the California Medical Association at the end of this session, to the regret of their friends and colleagues; now, therefore, be it

Resolved: That this House extends to Drs. Reynolds and Lum the appreciation of the members of the California Medical Association, and as an expression thereof this session of the California Medical Association House of Delegates, upon adjournment, declares this adjournment to be in honor of Drs. Reynolds and Lum.

A.M.A. DELEGATES

Author: Leon P. Fox.

WHEREAS, the House of Delegates of the American Medical Association is losing, by voluntary retirement, three of its most effective and dedicated delegates from C.M.A.; and

WHEREAS, these men have served long and well; therefore, be it

Resolved: That R. Stanley Kneeshaw of Santa Clara County, Cy Attwood of Alameda-Contra Costa County, and Don Cass of Los Angeles County be recognized by a standing ovation of this House.

DOCTOR FRANCIS J. COX

Author: Francis E. West, Past President.

WHEREAS, Dr. Francis J. Cox has contributed many years of devoted service to the advancement and betterment of the medical profession; and

WHEREAS, Dr. Cox has memorialized the California Medical Association by his leadership in the medico-economic field; and

WHEREAS, Dr. Cox is now voluntarily withdrawing from his position as Chairman of the Medical Services Commission of the C.M.A.; therefore, be it

Resolved: That Dr. Cox be thanked for his contributions by unanimous vote of this House of Delegates; and be it further

Resolved: That a copy of this resolution be appropriately inscribed and documented.

NEW MEDICAL SCHOOL

Author: Lewis T. Bullock.

WHEREAS, the population of California is rapidly expanding; and

WHEREAS, the number of physicians needed by the citizens will be progressively increasing; and

WHEREAS, the California Medical Association is devoted to the proposition that all citizens of California shall receive the best possible medical care; therefore, be it

Resolved: That the California Medical Association supports the development of another medical school in California.

BY-LAW AMENDMENTS

One proposed amendment to the Constitution of the California Medical Association and 16 proposed amendments to the By-Laws were dealt with by the 1960 House of Delegates.

The proposed Constitutional amendment failed to receive the required two-thirds vote. The following listing shows the By-Law amendments which were approved by the House or referred to the Council or other bodies for further study and recommendations.

BY-LAW AMENDMENT NO. 1

Author: Donald D. Lum.
Representing: The Council.

Be it Resolved: That Chapter VI, Section 7 of the By-Laws of this Association, California Medical Association, is hereby amended to increase the size of the Finance Committee from three (3) to five (5) so that said section shall hereafter read as follows:

"Section 7.—Finance Committee of Council.

"The Chairman of the Council, subject to its approval, shall appoint a finance committee of five members, designating one of the members as its chairman, the duties of which committee are hereinafter specified."

ACTION: Approved by House.

BY-LAW AMENDMENT NO. 2

Author: Donald D. Lum.
Representing: The Council.

Resolved: That Chapter X, Section 6, of the By-Laws be amended by deleting the second paragraph thereof and substituting therefor the following:

"The Finance Committee shall, by periodic inspection of accounts, bills and claims against the Association, and other items by means determined by it and approved by independent auditors, review all financial transactions of the Association and shall satisfy itself as to the validity of all withdrawals from depositaries approved by it. Checks or drafts drawn on Association accounts shall bear the signature of one or more authorized signers, as determined by the committee and approved by independent auditors, and all authorized signatories shall be covered by a surety bond."

ACTION: Approved by House.

BY-LAW AMENDMENT NO. 3

Author: Donald D. Lum.
Representing: The Council.

Resolved: That Chapter VIII, Section 6.5 of the By-Laws be amended by deleting from the second paragraph thereof the words shown below in parentheses and by adding the words shown below in italics, so that the paragraph shall read:

"At the first such caucus in each such district, the aggregate number of vacancies existing shall be divided into Offices No. 1, No. 2, et seq. with Offices Nos. 1, 4 and succeeding (multiples) *increments* of three carrying an initial term of one year and (then) thereafter terms of three years; with Offices Nos. 2, 5 and succeeding (multiples) *increments* of three carrying initial terms of two years and thereafter terms of three years; and with Offices Nos. 3, 6 and

succeeding (multiples) *increments* of three carrying initial terms of three years and thereafter terms of three years. *Where new Offices are created under the terms of Article III, Part B, Section 9(a) of the Constitution, each such new Office shall be numbered serially with those already existing and shall carry an initial term extending to the same date as has previously been established for Offices in the same numerical sequence, thereafter a term of three years.*"

ACTION: Approved by House.

' ' '

BY-LAW AMENDMENT NO. 4

Author: Donald D. Lum.
Representing: The Council.

Resolved: That Chapter VII, Section 1, Subsection (c) of the By-Laws of this Association, California Medical Association, is hereby amended to read as follows:

"(c) *Commission on Community Health Services,* responsible for the activities of and through which the following standing committees shall report:

"1. Committee on Rural Health,
"2. Committee on School Health,
"3. Committee on Industrial Health,
"4. Committee on Disaster Medical Care,
"5. Committee on Blood Banks,
"6. Committee on Allied Health Agencies,
"7. Committee on Traffic Safety."

ACTION: Approved by House.

' ' '

BY-LAW AMENDMENT NO. 5

Author: Donald D. Lum.
Representing: The Council.

Resolved: That Chapter VII, Section 1, Subsection (a) of the By-Laws of this Association, California Medical Association, is hereby amended to read as follows:

"(a) *Commission on Medical Services,* responsible for the activities of and through which the following standing committees shall report:

"1. Committee on Fees,
"2. Committee on Aging,
"3. Committee on Government Financed Medical Care,
"4. Committee on Rehabilitation."

ACTION: Approved by House.

' ' '

BY-LAW AMENDMENT NO. 6

Author: C. J. Attwood.
Representing: Constitution Study Committee.

Resolved: That Chapter III, Section 1, subsection (9), paragraph (a) be amended by deleting the final sentence of that paragraph, which reads: "A suspended member shall not be reinstated until he pays all dues accrued during the period of suspension."

ACTION: Approved by House.

' ' '

BY-LAW AMENDMENT NO. 7

Author: C. J. Attwood.
Representing: Constitution Study Committee.

Resolved: That Chapter III, Section 1, subsection (9), paragraph (a) be amended by adding to the third sentence of that paragraph the words shown in italics below, so that the sentence would read: "The Judicial Commission at the end of the suspended member's period of suspension shall consider the quality of his behavior during his suspension, and shall determine whether he shall be reinstated to membership in good standing or the period of suspension shall be extended; *provided that a suspension shall not extend beyond an aggregate period of five years.*"

ACTION: Approved by House.

' ' '

BY-LAW AMENDMENT NO. 8

Author: Los Angeles County Delegation.

WHEREAS, the aviation industry is one of the largest industries on the West Coast; and

WHEREAS, this rapidly growing industry presents many new medical problems; and

WHEREAS, these problems open the door to many new fields of medical research in connection with man's safe existence both on the ground and in the air, and in the future in outer space; and

WHEREAS, the present and projected future impact of aviation on medicine in general will have a definite effect on the medical interests of the public at large; now, therefore, be it

Resolved: That the By-Laws of the California Medical Association, Chapter IV, entitled "Sessions and Meetings; Scientific Sections, Section 1—Division of Scientific Work, Subsection a" be amended to hereafter read as follows:

"Subsection a, Scientific Sections:

"The scientific work of the Association shall be divided into nineteen scientific sections, as follows: Internal Medicine; General Surgery; Pediatrics; Ear, Nose and Throat; Urology; Anesthesiology; Obstetrics and Gynecology; Radiology; Industrial Medicine and Surgery; Aerospace Medicine; Pathology and Bacteriology; Dermatology and Syphilology; Neuropsychiatry; General Practice; Public

Health; Allergy; Eye; Orthopedics, and Physical Medicine.

ACTION: Referred to ad hoc Committee on Scientific Activities.

BY-LAW AMENDMENT NO. 9

Author: Ian Macdonald.
Representing: Los Angeles County Delegation.

WHEREAS, the Trudeau Society of Los Angeles, the Chest Disease Section of the County Medical Society, at one of its regular meetings, voted that appropriate steps be taken toward the establishment of a Section on Diseases of the Chest in the California Medical Association; and

WHEREAS, the Council of the Los Angeles County Medical Association voted on September 14, 1959, that the Trudeau Society present such a resolution to the Los Angeles County Medical Association's delegation for presentation at the next meeting of the House of Delegates of the California Medical Association; now, therefore, be it

Resolved: That the By-Laws of the California Medical Association, Chapter IV, entitled "Sessions and Meetings; Scientific Sections, Section 1—Division of Scientific Work, Subsection a" be amended to hereafter read as follows:

"Subsection a, Scientific Sections:

"The scientific work of the Association shall be divided into nineteen scientific sections, as follows: Internal Medicine; General Surgery; Pediatrics; Ear, Nose and Throat; Urology; Anesthesiology; Obstetrics and Gynecology; Radiology; Industrial Medicine and Surgery; Diseases of the Chest; Pathology and Bacteriology; Dermatology and Syphilology; Neuropsychiatry; General Practice; Public Health; Allergy; Eye; Orthopedics, and Physical Medicine.

ACTION: Referred to ad hoc Committee on Scientific Activities.

BY-LAW AMENDMENT NO. 10

Author: San Francisco Delegation.

Resolved: That the By-Laws be amended by the deletion of Section 12, Chapter V, which reads:

"The Committee on Credentials shall require each delegate and alternate who desires to be seated as a member of the House of Delegates, to subscribe to the oath or affirmation in the form required for officers under Section 3 of Chapter XIII. In the event of refusal to subscribe to such oath, the Credentials Committee may at its discretion refuse to include such person in its written report to the House of Delegates designating the delegates and alternates entitled to membership therein. Any person refused a seat by action of the Credentials Committee shall have the right to appeal to the House and by majority vote the House may overrule the Credentials Committee and seat such person as a delegate."

ACTION: Referred to Council for study of all oaths.

BY-LAW AMENDMENT NO. 11

Author: San Francisco Delegation.

Resolved: That the By-Laws be amended by the deletion of Section 3, Chapter XIII, which reads:

"All officers and employees of the Association, upon election or appointment, shall subscribe to an oath or affirmation as follows: 'I do not belong and have not belonged to any organization advocating the overthrow or change of the form of government of the U.S.A. by violent or unlawful means, nor do I belong or have belonged to any organization while it was listed, published or held to be subversive by the Department of Justice of the United States of America.' If, after full hearing the Council shall find that an officer or employee falsely subscribed to the oath or affirmation, it may in its discretion remove the officer or employee from his office or position and fill the vacancy so created."

ACTION: Referred to Council for study of all oaths.

BY-LAW AMENDMENT NO. 12

Author: Douglas G. Campbell.
Representing: San Francisco County.

WHEREAS, in 1949 it was voted that there be a By-Laws amendment to change the name of the Section on Neuropsychiatry to the Section on Psychiatry and Neurology, but this change was inadvertently omitted in the new Constitution; now, therefore, be it

Resolved: That the By-Laws of the California Medical Association, Chapter IV, entitled "Sessions and Meetings; Scientific Sections, Section 1—Division of Scientific Work, Subsection a" be amended to hereafter read as follows:

"Subsection a, Scientific Sections:

"The scientific work of the Association shall be divided into eighteen scientific sections, as follows: Internal Medicine; General Surgery; Pediatrics; Ear, Nose and Throat; Urology; Anesthesiology; Obstetrics and Gynecology; Radiology; Industrial Medicine and Surgery; Pathology and Bacteriology; Dermatology and Syphilology; *Psychiatry and Neu-*

rology; General Practice; Public Health; Allergy; Eye; Orthopedics; and Physical Medicine."

ACTION: Approved by House.

' ' '

BY-LAW AMENDMENT NO. 13

Author: Wells G. Cook.
Representing: Los Angeles County.

Resolved: That Chapter IV, Section 1, subsection (a) of the By-Laws be amended by inserting the words "Preventive Medicine and" before the words "Public Health" so that this scientific section shall become the Section on Preventive Medicine and Public Health.

ACTION: Referred to Council for study.

' ' '

BY-LAW AMENDMENT NO. 14

Author: Donald D. Lum.
Representing: The Council.

Resolved: That Chapter VII, Section 1, subsection (f) of the By-Laws be amended by deleting the period at the end of the section, by substituting therefor a comma and by adding the following language (new language shown in italics) *through which the following standing committees shall report:*

1. Committee on Cancer Education,
2. Committee on Tumor Tissue Registry,
3. Committee on Consultative Tumor Boards,
4. Committee on Special Cancer Problems,
5. Committee on New and Unproved Methods of Cancer Treatment.

ACTION: Approved by House.

' ' '

BY-LAW AMENDMENT NO. 15

Author: Alameda-Contra Costa Delegation.

Resolved: That should By-Law Resolution No. 7 be adopted, Chapter III, Section 1, subsection (9), paragraph (a), be further amended by adding the following sentence: "The decision of the Judicial Council to reinstate to membership or to extend the suspension of a member, may be expressed in resolution adopted by vote according to subsection (8) and shall be sent to the Secretary of the Society for distribution pursuant to subsection (10) (a)."

ACTION: Approved by House.

' ' '

BY-LAW AMENDMENT NO. 16

Author: Douglas Donath.

ACTION: Not approved by House.

CONSTITUTIONAL AMENDMENT

One proposed amendment to the Constitution of the California Medical Association was introduced in the 1960 House of Delegates. In accordance with requirements of the Constitution, this proposed amendment must lie on the table for one year, during which time it must be published in two issues of CALIFORNIA MEDICINE.

In the 1961 House of Delegates, this proposed amendment will be reviewed by a Reference Committee and reported back to the House of Delegates with the recommendation of that committee for approval or disapproval.

Proposed amendments to the Constitution may not be amended following their introduction but are voted on in the form in which they are introduced. A two-thirds affirmative vote in the House of Delegates is required for passage.

Author: C. J. Attwood.
Representing: Constitution Study Committee.

Resolved: That Article VIII, Section 3, of the Constitution be amended by deleting the final paragraph of the section, starting with the words "Further, such proposed amendment . . ." and concluding with the words "prior to submission to the House of Delegates for vote." and substituting therefor the following:

"Further, such proposed amendment or amendments shall be referred to the appropriate reference committee, which shall hold hearings on the proposed amendment or amendments during the course of its regular business while the Association is in convention.

"If the proposal or proposals are introduced during the first meeting of the House, hearings shall be held at both the current and the next regular session. In this event, the reference committee shall report at a subsequent meeting of the House at the current session its findings and recommendations on the proposed amendment or amendments; this report shall be solely for the guidance of the reference committee and the House at the regular session at which the amendment or amendments are to be subject to vote. The reference committee at the current session may, with the consent of the author of proposed amendment or amendments, alter, amend or modify the proposed amendment or amendments and offer such altered version at a later meeting during the current session, together with its recommendations thereon.

"If the proposal or proposals are introduced during the second meeting of the House, hearings on them shall be held at the next regular session, prior to their submission to the House of Delegates for vote."

Council Meeting Minutes

Tentative Draft: Minutes of the 458th Meeting of the Council, San Francisco, St. Francis Hotel, March 26, 1960.

The meeting was called to order by Chairman Sherman in the Borgia Room of the St. Francis Hotel, San Francisco, on Saturday, March 26, 1960, at 9:30 a.m.

Roll Call:

Present were President Foster, President-Elect Bostick, Speaker Doyle, Vice-Speaker Heron, Secretary Hosmer, Editor Wilbur and Councilors MacLaggan, Wheeler, Todd, Quinn, O'Neill, Kirchner, O'Connor, Shaw, Rogers, Gifford, Murray, Davis, Miller, Sherman, Campbell, Morrison, Anderson and Teall. None absent.

A quorum present and acting.

Present by invitation were Messrs. Hunton, Thomas, Clancy, Collins, Marvin, Whelan, Edwards and Dr. Batchelder of C.M.A. staff; Messrs. Hassard and Huber of legal counsel; county executives Scheuber of Alameda-Contra Costa, Jensen of Fresno, Pettis and Field of Los Angeles, Bannister of Orange, Brayer of Riverside, Dochtermann of Sacramento, Donmyer of San Bernardino, Nute of San Diego, Neick of San Francisco, Thompson of San Joaquin, Donovan of Santa Clara and Bailey of Tulare; Dr. Malcolm Merrill, state Director of Public Health, Dr. John Keye of the State Department of Social Welfare; Dr. A. E. Larsen and Messrs. Wilson Wahlberg, Martin Webb and Richard Lyon of California Physicians' Service; Mr. Charles O. Finley; Doctors Roberta Fenlon, Thomas Elmendorf, W. W. Stiles, John Schaupp, George Herzog, Homer Pheasant and others.

1. *Minutes for Approval:*

(a) On motion duly made and seconded, minutes of the 456th meeting of the Council, held February 20-24, 1960, were approved.

(b) On motion duly made and seconded, minutes of the 457th meeting of the Council, held February 24, 1960, were approved.

2. *Membership:*

(a) A report of membership as of March 24, 1960, was presented and ordered filed.

(b) On motion duly made and seconded in each instance, ten applicants were voted Retired Membership. These were: Frederick J. Carson, James Hilgesen, Alameda-Contra Costa County; Arthur M. Rosenthal, R. Esmond Smith, Leon J. Tiber, Leland S. Welbourn, Los Angeles County; Adolph Gottschalk, Albert M. Jacobs, S. Nicholas Jacobs, San Francisco County; Henry D. Stailey, Sonoma County.

(c) On motion duly made and seconded in each instance, 17 applicants were voted Associate Membership. These were: Carl V. Granger, Jr., Marin County; Richard H. Anderson, Amet El Aziz Zahawi, Orange County; Ross H. Seasly, Jr., San Bernardino County; Mary Bradford, Charles R. Cotham, San Diego County; Alfred L. Kavanagh, San Joaquin County; Joseph W. Galla, San Mateo County; Amalie Jacobsohn, Merrill Hubert Judd, Edward William McCormick, Antipas Merjanian, William Matthew Sproul, Gerald W. Turley, Neil Flaherty, Tokio Ishikawa, Milton Veldee, Santa Clara County.

(d) On motion duly made and seconded in each instance, reductions of dues were voted for 19 members for reasons of prolonged illness or postgraduate study.

(e) Applications for reductions of dues for other reasons were presented and referred to the Finance Committee for study and recommendation. On report of the committee, it was regularly moved, seconded and voted that these applications be denied and the applicants urged to resign their memberships temporarily and rejoin when they return to active practice in the county society area or elsewhere.

3. *1960 House of Delegates Actions:*

(a) *Recommendations of Reference Committee No. 1:*

Reports of District Councilors—Recommended these be circulated in the districts and not published in Pre-Convention Bulletin: It was agreed that district councilors consider the procedure in use in some districts, where regular reports are made following Council meetings, such reports prepared by the councilor and prepared and distributed to delegates through the C.M.A. office.

Committee on Disaster Medical Care—Recommended that county societies maintain strong and active local committees: Referred to Committee on Disaster Medical Care.

Committee on Community and Rural Health—Recommended continued studies of bracero problems: It was agreed to refer to committee, and that the committee give this high priority and keep county societies advised as to status of entire problem in C.M.A.

Commission on Medical Education—Re proposed committee on undergraduate activities: Refer to Committee on Medical Education for report to next Council meeting.

Commission on Medical Services—Urged publication of supplemental report in *Newsletter:* Agreed to publish in CALIFORNIA MEDICINE and publicize this publication in *Newsletter.*

Advertising Committee—Commend committee: Approved by Council for transmittal to committee members.

Social Security Poll Format—Refer back to committee: Agreed to refer back to committee, with suggestion that interested officers and councilors be invited to meet with committee. A specific group of councilors was designated to present the views of the Council to the committee.

(b) *Recommendations of Other Reference Committees:*

All resolutions adopted by the House of Delegates or specifically referred to the Council or to commissions or committees were reviewed. The following allocations or referrals were made, or affirmed, by the Council:

Referred to Council:

No. 16—Referred to Liaison Committee with California Hospital Association.

No. 23—Referred to Liaison Committee with California Hospital Association, Medical Review and Advisory Board and Legislative Committee.

No. 36—Tabled.

No. 37—Committee on Mental Health.

No. 40—Refer to Committee on Disaster Medical Care.

No. 48—Refer to Commission on Medical Services.

Referred to Commission on Medical Services (by action of House of Delegates or Council): Resolutions Nos. 30, 47, 48, 51, 59, 62, 65, 68, 73. (On No. 59, it was agreed that the Committee for Emergency Action could act if advisable.)

Referred to Liaison Committee between Commission on Medical Services and C.P.S.: Resolutions Nos. 6, 13, 57, 75, 76.

Referred to Board of Trustees of C.P.S.: Resolutions Nos. 3, 5, 7, 10, 11, 12, 14, 18, 29, 31, 45, 46.

Referred to Speaker of House of Delegates: Resolution No. 74.

Referred to Commission on Community Health Services: Resolution No. 9.

C.M.A. Staff to Implement—Resolutions Nos. 4, 8, 32, 33, 34, 35, 38, 41, 71.

Other Resolutions and Council Actions on Them:

No. 1—Committee on Scientific Work.

No. 2—Committee on Legislation.

No. 42—Ad hoc Committee on Scientific Activities.

No. 49—Publish in CALIFORNIA MEDICINE and in *Newsletter.*

No. 52—Finance Committee.

No. 53—Committee on Other Professions.

No. 54—First Resolved to Committee on Traffic Safety; second to Legislation.

No. 55—Ad hoc Committee on Scientific Activities.

No. 58—Committee on Legislation.

No. 61—Committee on School Health.

No. 66—Committee on Other Professions.

No. 67—Liaison Committee with State Bar.

No. 69—Committee on Legislation.

No. 70—Committee on Social Security Format.

No. 72—Bureau of Research and Planning.

By-Laws Amendments:

Nos. 8, 9, 13—Ad hoc Committee on Scientific Activities.

Nos. 10, 11—To legal counsel for opinion.

4. *Commission on Medical Services:*

Dr. Milo Youel of San Diego presented a suggested plan for the writing of medical cost insurance, utilizing a reserve and a loan fund for meeting costs. On motion duly made and seconded, it was voted to refer this to the Commission on Medical Services for study before referring it to the C.P.S. Board of Trustees.

Dr. Murray reported on the creation of an organization chart for the Commission—C.P.S. Liaison Committee and proposed several nominees for appointment to the committee. It was regularly moved, seconded and voted to refer these names to the Committee on Committees, with the Council to add one additional member and to designate a chairman.

On the liaison committee to the State Department of Social Welfare, Dr. Sherman expressed his wish to be relieved of the chairmanship and it was regularly moved, seconded and voted to appoint Dr. William Quinn as chairman.

On the advisory committee to the State Board of Social Welfare, the resignation of Dr. Harrington was received. Since the State Board has announced the necessity of reducing C.M.A. representation on this board to two members, it was regularly moved, seconded and voted to approve Doctors Sherman and Quinn as members.

A letter from a member, complaining of the choice of committee members under the Commission on Medical Services, was read to the Council. On motion duly made and seconded, it was voted to acknowledge receipt of this letter.

5. *Committee on Committees:*

Councilor Davis reported for his study committee that it was recommended that the Committee on Committees be made up of the President, President-Elect, Speaker, Council Chairman and five council-

ors who are not commission chairmen. It was also recommended that commission chairmen and others be invited to meet with the committee as consultants and that all meetings be in executive session. On motion duly made and seconded, these proposals were approved. On motion duly made and seconded, Councilors Gifford, Davis, Wheeler, Todd and Anderson were elected under the above committee structure.

On motion duly made and seconded, it was voted to refer to the Committee on Committees the matter of nominations for members of the Liaison Committee to the State Bar and the Advisory Committee to the California Medical Assistant's Association.

6. *California Medicine:*

Editor Wilbur proposed that a series of articles be run in CALIFORNIA MEDICINE to outline each aspect of the structure and activities of the Association, with the possibility that these articles might be incorporated in a pamphlet upon their completion. On motion duly made and seconded, this proposal was approved and it was voted to consider preparation of such a pamphlet for distribution to all new members of the Association after the articles had all been prepared and printed.

7. *Ad Hoc Committee on Scientific Activities:*

Dr. Wilbur gave a progress report for the Committee on Continuing Education and Scientific Activities, pointing out that subcommittees have been formed to consider, as separate items, CALIFORNIA MEDICINE, postgraduate activities and Annual Sessions. Further reports will be made later.

8. *Olympic Winter Games:*

Councilor Davis introduced Dr. W. W. Stiles, medical director of the Eighth Olympic Winter Games. Dr. Stiles reported that about 150 physicians had volunteered their services and that 58 had served, not more than 32 at any one time. All cases were handled effectively and about 2,500 patients were seen. Of these, roughly one-third were surgical cases, one-third upper respiratory cases and the balance miscellaneous medical problems. Dr. Stiles was complimented by the chairman for his good work.

9. *Financial:*

A report of bank balances, loans, etc., as of March 24, 1960, was presented and ordered filed.

Dr. Heron, chairman of the Finance Committee, recommended that an additional $1,000 be appropriated for the ad hoc Committee on Continuing Education and Scientific Activities. On motion duly made and seconded, this appropriation was voted by the required three-fourths vote. If additional funds are required in the next fiscal year, the committee will present its needs to the Council.

Dr. Heron also recommended that an additional $7,500 be appropriated for the purchase of equipment needed in the office. On motion duly made and seconded, this appropriation was voted by the required three-fourths vote.

On applications for reduction of dues for miscellaneous causes, the committee recommended that applicants be advised to resign temporarily and seek readmission when they return to active practice. (See also item 2e.)

10. *Reports of President, President-Elect:*

Doctors Foster and Bostick gave progress reports on their current activities. No action was required on either.

11. *Commission on Public Policy:*

(a) For the Committee on Legislation, Mr. Ben Read reported on the status of the current session of the State Legislature.

(b) For the Public Relations Committee, Dr. Watts reported on consideration given to an expanded program of public relations, including securing additional personnel for the department and for the Bureau of Research and Planning. On motion duly made and seconded, the Executive Director was authorized to secure needed personnel.

On motion duly made and seconded, it was voted to name the Council chairman, Finance Committee chairman and Public Relations chairman as a review committee to consider and approve matters of financing, personnel and other items in the public relations program.

Dr. Watts proposed that a steering committee be formed to prepare the programs for public relations conferences, with district councilors to choose members of this committee from among the public relations chairmen in their districts. On motion duly made and seconded, this proposal was approved.

On motion duly made and seconded, it was voted to authorize the Committee on Public Relations to establish a subcommittee on motion pictures, radio and television and, in conjunction with the Committee on Committees, to bring in nominations for this committee at the next Council meeting.

A question brought by members of the Commission on Cancer, asking clarification of the ethics of physicians sending followup examination letters to their patients, was discussed. It was agreed that such letters, if sent, should suggest a general examination rather than examination for a specific disease and that they should eliminate the possibility of the patient's being under the care of another physician. On motion duly made and seconded, it was voted that such letters under these circumstances would not be deemed unethical.

Mr. Clancy gave a progress report on a campaign directed against pending legislation considered inimical to the public health.

Mr. Clancy presented a proposed Certificate of Appreciation to be presented to the Kern County Medical Society in recognition of the services performed by members of the society following a disastrous train-truck wreck near Bakersfield. It was explained that such certificates might be prepared under unusual circumstances where individuals or groups, medical or lay, performed outstanding services in behalf of the public. On motion duly made and seconded, approval was voted for such certificates.

12. *State Department of Public Health:*

Dr. Malcolm Merrill, State Director of Public Health, gave a progress report on the work of the Department in fields of scientific research, narcotics and nalline testing, alcoholic rehabilitation, food additives, auto exhaust and air pollution. He also reported that the Hospital Council would meet April 1 to make final allocations of funds for aid in construction of hospitals and allied structures.

13. *California Physicians' Service:*

Dr. Heron reported that the stabilization fund of California Physicians' Service has almost reached the minimum requirements recommended by the NAIC and that C.P.S. programs are progressing satisfactorily.

14. *Committee on Insurance:*

Councilor Kirchner introduced Dr. Homer Pheasant, chairman of the Insurance Committee, and Mr. Charles O. Finley, administrator of the present disability insurance program. Dr. Pheasant commented on a financial report of the disability insurance program which had previously been distributed to Council members. Mr. Finley reported on a proposed program to be offered members of the American Medical Association to provide lifetime coverage for disabilities arising through either accident or illness, which several insurance carriers are prepared to underwrite.

On motion duly made and seconded, it was voted to extend the thanks of the Association to Mr. Finley for his conduct of the disability insurance program.

15. *Government Purchases of Medical Services:*

Dr. Teall discussed the very urgent need for doctors to clarify their thoughts on what they believe to be the proper role of government in medical care. He proposed a study to determine guide lines of philosophy and principle which C.M.A. can support as to (a) what medical services are the proper responsibility of government, (b) by which level of government, (federal, state, county, city) these services should be provided and (c) for which classes of citizens they should be provided. Since the subject concerns many C.M.A. committees and commissions it cannot be easily assigned to any one existing group for study and report. It was therefore, moved and passed that an ad hoc committee be requested to determine, and to recommend to the Council at its April meeting, how and by whom such a study can best be made. This ad hoc committee is to consist of the chairmen of the Commissions on Medical Service, on Public Agencies and on Public Policy and the chairman and members of the Bureau of Research and Planning. Dr. Sherman appointed the chairman of the Commission on Medical Services to chair this ad hoc recommending committee.

16. *Staff Report:*

Mr. Hassard directed attention to a report by California Physicians' Service on the MD-65 contracts, which to date have required no financial contribution by the Association.

Mr. Hassard also asked that the councilors review a set of suggested procedures for the Annual Session, drafted by the staff, and be prepared to decide on these questions at the next meeting.

Mr. Hassard also reported that within about ten days the final contract provisions for service and indemnity programs for federal employees would be announced. (In California, the service contract would provide for a unit factor of five on the Relative Value Study for employees or dependents up to a $7,200 income ceiling; the lower level of benefits would establish an income ceiling of $4,000 and benefits, on an indemnity basis only, of about factor three on the Relative Value Study.)

Adjournment:

There being no further business to come before it, the meeting was adjourned at 5:40 p.m.

SAMUEL R. SHERMAN, M.D., *Chairman*
MATTHEW N. HOSMER, M.D., *Secretary*

In Memoriam

BARKAN, HANS. Died in San Francisco, March 7, 1960, aged 77. Graduate of Harvard Medical School, Boston, Massachusetts, 1910. Licensed in California in 1914. Doctor Barkan was a retired member of the San Francisco Medical Society and the California Medical Association, and an associate member of the American Medical Association.

✤

BRANDON, THOMAS CAMPBELL. Died in San Jose, March 29, 1960, aged 50. Graduate of Jefferson Medical College of Philadelphia, Pennsylvania, 1935. Licensed in California in 1953. Doctor Brandon was a member of the Santa Clara County Medical Society.

✤

CHRISTENSEN, EUGENE L. Died in Covina, March 22, 1960, aged 62. Graduate of University of Minnesota Medical School, Minneapolis, 1924. Licensed in California in 1930. Doctor Christensen was a member of the Los Angeles County Medical Association.

✤

DOUGALL, JOHN PARK (J. PARK). Died in Los Angeles, March 31, 1960, aged 85. Graduate of California Eclectic Medical College, Los Angeles, 1904. Licensed in California in 1904. Doctor Dougall was a life member of the Los Angeles County Medical Association.

✤

HAENSZEL, ALLEN LEE. Died in San Bernardino, December 13, 1959, aged 74. Graduate of University of Buffalo School of Medicine, New York, 1908. Licensed in California in 1919. Doctor Haenszel was a member of the San Bernardino County Medical Society.

✤

LEGGE, ROBERT THOMAS. Died in Berkeley, March 21, 1960, aged 87, acute myocardial infarction with acute ventricular fibrillation. Graduate of University of California School of Medicine, Berkeley-San Francisco, 1899. Licensed in California in 1899. Doctor Legge was a retired member of the Alameda-Contra Costa Medical Association and the California Medical Association, and an associate member of the American Medical Association.

✤

LEWIS, SILAS ARTHUR. Died in San Gabriel, February 18, 1960, aged 83. Graduate of State University of New York College of Medicine at New York City, Brooklyn, New York, 1910. Licensed in California in 1919. Doctor Lewis was a retired member of the Los Angeles County Medical Association and the California Medical Association, and an associate member of the American Medical Association.

✤

MCCHESNEY, GEORGE JEWETT. Died in Mill Valley, March 11, 1960, aged 85. Graduate of University of California School of Medicine, Berkeley-San Francisco, 1900. Licensed in California in 1900. Doctor McChesney was a retired member of the San Francisco Medical Society and the California Medical Association, and an associate member of the American Medical Association.

✤

MCMARTIN, DAVID EDMOND. Died March 14, 1960, aged 37, of acute coronary occlusion. Graduate of University of Southern California School of Medicine, Los Angeles, 1946. Licensed in California in 1946. Doctor McMartin was a member of the Placer-Nevada-Sierra County Medical Society.

✤

MULVANY, THOMAS ANTHONY. Died March 26, 1960, aged 44. Graduate of Marquette University School of Medicine, Milwaukee, Wisconsin, 1943. Licensed in California in 1943. Doctor Mulvany was a member of the San Francisco Medical Society.

✤

OVIEDO, LOUIS JEROME. Died February 9, 1960, aged 62. Graduate of University of California School of Medicine, Berkeley-San Francisco, 1923. Licensed in California in 1923. Doctor Oviedo was a member of the Yolo County Medical Society.

✤

SELTZER, SOL NORRIS. Died December 29, 1959, aged 49. Graduate of Wayne State University College of Medicine, Detroit, Michigan, 1937. Licensed in California in 1946. Doctor Seltzer was a member of the San Bernardino County Medical Society.

✤

SUTHERLAND, ROBERT THOMAS. Died February 17, 1960, aged 76, of atherosclerotic heart disease. Graduate of University of California School of Medicine, Berkeley-San Francisco, 1908. Licensed in California in 1908. Doctor Sutherland was a retired member of the Alameda-Contra Costa Medical Association and the California Medical Association, and an associate member of the American Medical Association.

CORRECTION

Data on San Bernardino County was inadvertently omitted from Table 2 of the article, "The Number and Distribution of Physicians in California," by Justin J. Stein, M.D., which appeared in the March issue of CALIFORNIA MEDICINE.

The missing data are supplied herewith:

TABLE 2.—*Table Showing Ratio of Physicians to Population*

County	Population		Licensed Physicians, M.D.		Licensed Physicians, D.O.		Total		No. of Persons Per Physician	
	7/1/54	7/1/58	3/2/55	3/2/58	10/1/54	6/1/58	1955	1958	1955	1958
San Bernardino	362,700	470,500	397	499	41	49	438	548	828	859

PUBLIC HEALTH REPORT

MALCOLM H. MERRILL, *M.D., M.P.H.*
Director, State Department of Public Health

REGULATIONS GOVERNING the registration of possessors of sources of ionizing radiation were adopted April 22 by the State Board of Public Health as a requirement of a new state law adopted by the Legislature in its 1959 session.

Purpose of the legislation is to provide information relating to the amounts, kinds and uses of sources of radiation in California. The data collected through registration will be useful in evaluating potential hazards, in estimating the magnitude of the population's exposure to radiation, and in encouraging the development of peacetime uses of atomic energy and radiation consistent with requirements for health and safety.

The regulations, which will go into effect May 22, include:

1. Persons with x-ray or fluoroscopic machines, radioactive materials, particle accelerators, reactors, devices containing radioisotopes and any other sources of ionizing radiation must register before July 31. Excluded from registration are small amounts of some types of radioactive materials. A complete list of exclusions can be obtained upon request from the department's Bureau of Radiological Health, 2151 Berkeley Way, Berkeley.

2. Anyone acquiring a radiation source after June 30 must register within 30 days of the date of acquisition.

3. It is the responsibility of each possessor of a radiation source to obtain and submit the necessary registration forms.

Forms and instructions will be mailed to most persons believed to have sources of radiation, including physicians, dentists, osteopaths, chiropractors, chiropodists, veterinarians and hospitals, as well as persons with specific licenses issued by the Atomic Energy Commission.

Plans are under way with some local health departments for them to participate in the registration program.

* * *

A leaflet giving the signs and symptoms of syphilis and gonorrhea has just been published by the State Health Department for use with Spanish-speaking persons in California who have difficulty reading English. The text on the top part of each page is written in Spanish, and is repeated on the lower part in simple English.

In addition to giving the signs and symptoms of gonorrhea and syphilis, it discusses the way these diseases are spread, and stresses the importance of going to a physician if signs of venereal disease are present.

This pocket-sized leaflet, titled *Peligro! Danger!*, can be obtained through local health departments.

* * *

Phenylketonuria, a disease which causes permanent mental retardation if not diagnosed soon after birth, is being successfully prevented in California with a special, synthetic diet supplied by this department in certain cases.

The disease, which develops within six weeks after birth, is caused by congenital inability to metabolize the essential amino acid *phenylalanine*. It can be prevented if diagnosis is made early and the child is placed on a low phenylalanine diet.

With a grant from the U. S. Children's Bureau, this department, through Children's Hospital of Los Angeles, will now assist families of phenylketonuric infants who cannot afford the added cost of obtaining this special diet.

Twenty-six health departments in California are now participating in a phenylketonuria detection program, the first large-scale attempt in this country to screen well babies for phenylketonuria. Being used is a simple, inexpensive diaper test for early detection. This consists of placing a drop of 10 per cent aqueous ferric chloride on an infant's wet diaper. The appearance of a dark-green color may indicate that the baby has phenylketonuria.

The diet will be available only to children under the age of three years at the time of beginning the diet, under the care of a qualified physician, with a diagnosis of phenylketonuria confirmed by serum phenylalanine determinations, and approved by a special review committee.

Applications should be made in writing to the study project director: Dr. Richard Koch, director, Child Development Clinic, Children's Hospital, 4614 Sunset Boulevard, Los Angeles 27.

Committees

THE PRIVILEGE of membership in the Woman's Auxiliary to your local county medical society inherently involves and invokes many obligations. High on the list of these is the obligation of active committee work.

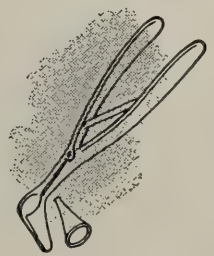
I cannot emphasize too strongly the important role which committees play in the success of your local county auxiliary. It matters little whether these committees are standing or special committees. Each one of these has its particular important function to perform. Therefore, the county officers should give thought and consideration to the careful selection of committee chairmen and members, to the end that they will accomplish their assigned tasks.

To the President of the Auxiliary falls the responsibility of not only selecting her committee chairmen and members wisely, but also of assigning to these committees the purposes and functions of their particular committees. While generally speaking these activities are well outlined in the by-laws of the county societies, occasions will arise when special committees are formed, and the President must indicate the duties of that particular committee.

To be effective and productive, a committee must be well attended and supported. Active attendance and participation are the keynotes of a successful committee. Failure to attend committee meetings indicates a lack of desire and a lack of responsibility to the Auxiliary. In case of continued absenteeism, replacements should be made. It would be advisable for the committee chairman to appoint a committee member to serve as secretary to keep minutes and to transmit these minutes to the executive board. All committee reports should be written (in the third person) so that a permanent record may be kept. They should contain information and/or recommendations to the Board of Directors of the Auxiliary. Committees have only the power assigned to them by the organization. The minutes of the committee meetings will serve not only as an important liaison between the committee and the executive board, but will also better clarify the reasons for the committee's decisions. In addition, these minutes will be useful as an important guide in the preparation of required annual reports.

The success of a county auxiliary is measured in large part by the accomplishments of its committees. Clearly, the major burden of the many, many activities of our auxiliaries must fall upon the committee's shoulders. The many projects encompassed by these committees literally range from *A* (A.M.E.F.) to *S* (Safety). They cover all the phases requested of us by our parent organization —the California Medical Association. The importance of these committees cannot be overemphasized. I know it is the desire of every county president that each committee member will give of her time and effort diligently, conscientiously and enthusiastically in the furtherance of her Auxiliary. Enthusiasm is contagious. To every committee chairman, I say, make enthusiasm for Auxiliary a habit.

MRS. SAMUEL GENDEL
President, Woman's Auxiliary to the California Medical Association



NEWS & NOTES

NATIONAL • STATE • COUNTY

ALAMEDA

The East Bay Pediatric Society, formed in November of 1959 "for the purpose of uniting the Pediatricians of Alameda and Contra Costa counties in working for the health and welfare of all children," has elected Dr. Edward F. Carlson president and Dr. Marianne Schour secretary.

* * *

A research fellowship to be underwritten by the medical staff of **Children's Hospital of the East Bay** was announced recently. Residents at Children's Hospital of the East Bay, as well as scientists from all over the world, will qualify for this program in future years. They will be selected by the medical staff research committee, which is headed by Dr. Charles L. Dimmler, Jr.

The medical staff is financing this fellowship through medical staff dues plus voluntary contributions of $10 per year from members of the staff. Contributions from other interested persons will be invited.

LOS ANGELES

The Division of Cardiology, Department of Pediatrics, University of California at Los Angeles, announces the establishment of **a training program in pediatric cardiology.** This will include instruction in all of the various aspects of both clinical and basic science pertinent to the practice and teaching of pediatric cardiology. The program is primarily designed for those interested in a career in academic medicine or for those who will be engaged primarily in the practice of clinical cardiology.

Graduates of Class A medical schools who have completed pediatric training acceptable for certification by the American Board of Pediatrics are eligible. Stipends begin at $5,500 per year with additional allowance for dependents.

Further information may be obtained from Dr. Arthur J. Moss, Department of Pediatrics, University of California at Los Angeles, Los Angeles 24.

* * *

Dr. George E. Judd of Los Angeles was elected first vice-president of the American College of Obstetricians and Gynecologists at the organization's annual meeting which was held in Cincinnati last month.

* * *

The Metropolitan Dermatological Society of Los Angeles has announced election of the following officers for the current year: President, Dr. Max Popper; vice-president, Dr. Murray Zimmerman; secretary-treasurer, Dr. Rose B. Saperstein; program chairman, Dr. John Carney.

* * *

A new $1,000,000 **rehabilitation center** has been opened at Cedars of Lebanon Hospital, Los Angeles. It is said to be one of the most modern and comprehensive facilities in the West for treating disabling diseases and accidents. It has a capacity of 250 patients per day, triple the former daily patient average.

Dr. Harry R. Brickman, formerly director of the Psychiatric Clinic, U.C.L.A. Medical Center, has been appointed director of the newly formed Los Angeles County Department of Mental Health.

This department, created by the Board of Supervisors with the approval of the Los Angeles County Medical Association, is charged with responsibilities for coordinating and further developing the community mental health program in Los Angeles County under provisions of the Short-Doyle act.

SAN FRANCISCO

The first joint annual convention of the **American Association of Bioanalysts** and the **California Association of Clinical Laboratories** will be held June 2, 3 and 4 in the new Jack Tar Hotel in San Francisco. Laboratory directors from all over the nation will meet to discuss new methods of bioanalysis and clinical laboratory techniques.

GENERAL

The Second Annual Oregon Cancer Conference will be held July 7 and 8 in Portland under the joint sponsorship of the Oregon State Medical Society, the Oregon Division of the American Cancer Society, and the University of Oregon Medical School.

The list of guest lecturers for the conference includes Dr. Oscar Creech, Jr., of New Orleans, professor and chairman of the department of surgery at Tulane University School of Medicine; Dr. J. Hartwell Harrison of Boston, clinical professor of genito-urinary surgery at Harvard Medical School; Dr. Henry Jaffe of Los Angeles, director, division of radiation therapy and nuclear medicine at Cedars of Lebanon Hospital; Dr. I. S. Ravdin of Philadelphia, professor of surgery at the University of Pennsylvania Medical School; and Dr. R. Wayne Rundles of Durham, North Carolina, of the department of medicine at Duke University Medical Center.

* * *

The American Academy of General Practice has joined the **National Health Council,** bringing Council membership to 71 organizations. The Academy has a membership of more than 26,000 physicians in the general practice of medicine and surgery.

The National Health Council, which is made up of the principal voluntary, professional and governmental health agencies and selected business and civic groups concerned with health improvement, provides a mechanism through which member agencies can work together to promote individual and community health.

* * *

The Editors of Modern Medical Monographs announce the 1960 **competition for unpublished manuscripts** on clinical subjects in the field of internal medicine. The purpose of these annual awards, which are known as the Modern Medical Monographs Awards, is to stimulate young physicians to communicate their work in the classical form of the monograph and to achieve high standards of medical writing.

The first prize is $500. In addition, the authors of other top-ranking manuscripts which are found suitable will be offered a contract for publication of their work as a book in the series Modern Medical Monographs under standard royalty arrangements.

Rules governing the competition are:

1. The author must be a graduate physician less than 40 years of age.

2. Manuscripts (including illustrations, if any) should be submitted in duplicate (original and one copy) by registered mail, postmarked no later than December 1, 1960, to

Irving S. Wright, M.D., 450 East 69th Street, New York 21, New York.

3. The manuscript, including the bibliography, must consist of not fewer than 130 or more than 200 double-spaced typewritten pages with one-inch margins, and not more than 30 illustrations (pictorial charts, drawings, diagrams or photographs).

4. Fishbein's book, "Medical Writing" (third edition), should be followed in preparation of the manuscript, use of abbreviations, etc., and bibliographic form.

POSTGRADUATE EDUCATION NOTICES

THIS BULLETIN of the dates of postgraduate education programs and the meetings of various medical organizations in California is supplied by the Committee on Postgraduate Activities of the California Medical Association. In order that they may be listed here, please send communications relating to your future medical or surgical programs to: Mrs. Margaret H. Griffith, Director, Postgraduate Activities, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5.

UNIVERSITY OF CALIFORNIA AT LOS ANGELES

Clinical Traineeships — Anesthesia, Dermatology and Pediatric Cardiology. Dates by arrangement. Minimum period—two weeks. Fee: Two weeks, $150.00; four weeks, $250.00.

SURGICAL ANATOMY. Saturday through Tuesday, June 4 through 7.

Head and Neck. Saturday, June 4. Seven hours. Fee: $40.00.

Thorax, Abdomen and Pelvis. Sunday and Monday, June 5 and 6. Fourteen hours. Fee: $80.00.

Extremities. Tuesday, June 7. Seven hours. Fee: $40.00.

General Pediatrics. Sunday through Wednesday, July 17 through 20. Lake Arrowhead, University of California Residential Conference Center. Sixteen hours. Fee: $137.50 (including room and meals).

Advance Seminar in Internal Medicine. Wednesday through Sunday, July 20 through 24. University of California Residential Conference Center, Lake Arrowhead. Eighteen hours. Fee: $150.00 (including room and meals).

Dermatologic Therapy. Monday and Tuesday, July 25 and 26. Twelve hours. Fee: $40.00.

Advanced Seminars in Dermatology (for Dermatologists). Wednesday through Sunday, July 27 through 31. University of California Residential Conference Center, Lake Arrowhead. Fourteen and one-half hours. Fee: $150.00 (including room and meals).

Anesthesia for Special Procedures. Wednesday, Thursday and Friday, August 3, 4 and 5. Eighteen hours. Fee: $60.00.

Arthritis and Rheumatism. Wednesday and Thursday, August 17 and 18. Twelve hours.*

Obstetrical Procedures and Complications. Thursday and Friday, August 26 and 27. Twelve hours. Fee: $50.00 (includes two luncheons).

*Fees to be announced.

For Ancillary Personnel

Fifth Regional Conference for Nurses. Sunday through Wednesday, June 12 through 15. Thirty-two hours. Fee: $80.00.

The College Nurse: New Concepts in Her Profession. Friday and Saturday, June 17 and 18. Sixteen hours. Fee: $20.00.

9th Annual Symposium in Clinical Laboratory Technology. Saturday and Sunday, June 18 and 19. Sixteen hours. Fee: $20.00.

Workshops for School Nurses:

Riverside, Tuesday through Saturday, June 21 through 25. Forty-five hours. Fee: $40.00.

Los Angeles, Tuesday through Saturday, July 5 through 9. Forty-five hours. Fee: $40.00.

San Diego, Wednesday through Sunday, July 13 through 17. Forty-five hours. Fee: $40.00.

Contact: Thomas H. Sternberg, M.D., assistant dean for Continuing Medical Education, U.C.L.A. Medical Center, Los Angeles 24. BRadshaw 2-8911, Ext. 7114.

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Proctology. Thursday and Friday, May 19 and 20. Fourteen hours. Fee: $40.00.

A Course on the Foot. Thursday to Saturday, June 9 to 11. Twenty-one hours. Fee: $50.00.

Obstetrics and Gynecology. Thursday to Saturday, September 15 to 17. Twenty-one hours.*

Surgery, Franklin Hospital. Saturday and Sunday, October 8 and 9. Fourteen hours.*

Dermatology. Friday and Saturday. October 14 and 15. Fourteen hours.*

Fundamental Practices of Radioactivity and the Diagnostic and Therapeutic Uses of Radioisotopes. Two or three month course limited to one enrollee per month. Fee: $350.00.

For Ancillary Personnel

Human Relations in the Modern Hospital. Monday through Friday, June 13 through 17. Fee: $50.00.

Integration of Psychiatric Principles in the Total Curriculum. Tuesday to Friday, July 5 to August 12. Fee: $100.00.

Cancer Nursing. Wednesday through Friday, August 10 through 12.*

Continuing Education Conference Series. Tuesday through Friday, September 6 through 16.*

Administration of Nursing Care. Tuesdays, September 13 through December 13. Fee: $45.00.

Nutritional Aspects of Nursing Care. September 21 through November 9.*

Contact: Seymour M. Farber, M.D., assistant dean, Department of Continuing Medical Education, University of California Medical Center, San Francisco 22. MOntrose 4-3600, Ext. 665.

STANFORD UNIVERSITY SCHOOL OF MEDICINE, PALO ALTO

Emotional and Social Aspects of Child Health in Pediatric Practice. June 13 through 24. *Contact:* Hale F. Shirley, M.D., Professor of Pediatrics and Psychiatry, Stanford Medical Center, 300 Pasteur Drive, Palo Alto, Calif.

STANFORD HOSPITAL, SAN FRANCISCO
(Lane Presbyterian Medical Center)

Eye Conference. Each Monday morning.

Didactic Course in Ophthalmology. Monday and Wednesday, 7 to 8:30 p.m.

Course on Keratoplasty for Specialists in Ophthalmology. Wednesday through Friday, May 18 through 20.

Vector-Electrocardiography. Saturday, May 28.

Postgraduate Conference in Strabismus. Wednesday through Friday, July 13 through 15. Fee: $75.00.

Postgraduate Conference, Retinal Detachment. Wednesday, Thursday and Friday, September 14, 15 and 16.

Contact: Arthur Selzer, M.D., program committee chairman, San Francisco-Stanford Hospital, Clay and Webster Sts., San Francisco 15.

UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES

Cardiac Resuscitation. Sponsored by the Los Angeles County Heart Association each Wednesday throughout the year, 4 to 6 p.m. USC Medical Research Building, Room 211, 2025 Zonal Avenue. Residents and interns of Los Angeles County, and all armed forces medical personnel admitted without fee. Tuition for all other physicians: $30.00. (Each session all-inclusive.)

Basic Home Course in Electrocardiography. One year postgraduate series, electrocardiogram interpretation by mail. Physicians may register at any time and receive all 52 issues. Fifty-two weeks. Fee: $100.00.

Advance Home Course in Electrocardiography. One year postgraduate series, electrocardiogram interpretation by mail. Fifty-two issues: $85.00. Physicians may register at any time.

Hawaii Course: The USC School of Medicine will offer the Third Postgraduate Refresher Course to be held in Honolulu and on board the S.S. *Lurline* from August 4 to August 20, 1960. (As a time and money saver, round trip air travel is also possible August 4 to August 14.)

Contact: Phil R. Manning, M.D., associate dean and director, Postgraduate Division, University of Southern California School of Medicine, 2025 Zonal Avenue, Los Angeles 33. CApital 5-1511.

COLLEGE OF MEDICAL EVANGELISTS

CLINICAL TRAINEESHIPS available in all clinical departments by arrangement with the Postgraduate Division and the chairman of the department or departments involved. Eighty hours minimum. Fee: As arranged.

Diseases of the Chest: Two and four-week Traineeships in cooperation with the Los Angeles County Hospital. Dates as arranged.

Anesthesia. Monday through Friday. Dates as arranged. Six months. Fee: $350.

JOINT MANIPULATION. Monday through Friday, 8:00 to 12:00, dates to be arranged. Twenty hours. Fee: $75.00.

For information contact: G. E. Norwood, M.D., assistant dean and chairman, Division of Postgraduate Medicine, College of Medical Evangelists, 1720 Brooklyn Ave., Los Angeles 33. ANgelus 9-7241, Ext. 214.

CALIFORNIA MEDICAL ASSOCIATION
POSTGRADUATE INSTITUTE—1960
(Tenth Anniversary Year)

Sacramento Valley Counties in cooperation with UCLA School of Medicine, July 1 and 2. Tahoe Tavern, Lake Tahoe. *Chairman:* Herbert W. Korngold, M.D., 1217 30th Street, Sacramento.

Contact: The chairmen listed above, or Postgraduate Activities Office, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5.

* * *

AUDIO-DIGEST FOUNDATION, a nonprofit subsidiary of the C.M.A., offers (on a subscription basis) a series of six different hour-long tape recordings covering general practice, surgery, internal medicine, obstetrics and gynecology, pediatrics and anesthesiology. Designed to keep physicians posted on what is new and important in their respective fields, these programs survey current national and international literature of interest and contain selected highlights of on-the-spot recordings of national scientific meetings, panel discussions, symposia, and individual lectures. For information contact Mr. Claron L. Oakley, Editor, 1919 Wilshire Blvd., Los Angeles 57, HUbbard 3-3451.

Medical Dates Bulletin

MAY MEETINGS

NATIONAL TUBERCULOSIS ASSOCIATION—AMERICAN TRUDEAU SOCIETY Annual Meeting. May 16 through 19. Statler Hilton and Biltmore Hotels, Los Angeles. *Contact:* Mr. Sherman Asche, general chairman, Annual Meeting Committee, P. O. Box 4037, Santa Barbara.

AMERICAN COLLEGE OF NUTRITION 1960 Annual Convention. May 20 through 22. Huntington Sheraton Hotel, Pasadena. *Contact:* Donald B. Haynie, executive secretary, 10651 West Pico Blvd., Los Angeles 64.

CALIFORNIA HEART ASSOCIATION Annual Meeting and Scientific Session. May 20 through 22. Claremont Hotel, Berkeley. *Contact:* J. Keith Thwaites, executive director, 1428 Bush Street, San Francisco 9.

GROUP PSYCHOTHERAPY ASSOCIATION OF SOUTHERN CALIFORNIA 7th Annual Conference. Saturday, May 21. Chapman Park Hotel, Los Angeles. *Contact:* A. R. Abarbanel, M.D., chairman, 435 N. Bedford Drive, Beverly Hills.

LONG BEACH SURGICAL SOCIETY Annual "Clinic Day." May 21. Lafayette Hotel, Long Beach. 2 p.m. to 9 p.m. *Contact:* Harriman Jones, M.D., secretary-treasurer, 211 Cherry Ave., Long Beach 2.

JUNE MEETINGS

CHILDREN'S HOSPITAL OF THE EAST BAY "The Clifford Sweet Seminar." June 2, 3 and 4. Claremont Hotel, Berkeley. *Contact:* James L. Dennis, M.D., medical director, Children's Hospital of the East Bay, 51st at Grove, Oakland 9.

AMERICAN ASSOCIATION OF BIOANALYSTS and CALIFORNIA ASSOCIATION OF CLINICAL LABORATORIES Joint Convention, June 2, 3 and 4, Jack Tar Hotel, San Francisco. *Contact:* William Reich, convention manager, Lafayette Laboratory, 1409 Nursery Lane, Walnut Creek.

San Francisco Psychoanalytic Institute one-day workshop on Problems of Childhood and Adolescence. June 5. Guest speakers: Dr. Anneliese F. Korner of Hampstead Child-Therapy Clinic, London, England, and Dr. Fritz Redl, Stanford Center for Advanced Study in the Behavioral Sciences. Mark Hopkins Hotel, San Francisco. Fee: $10.00. *Contact:* Miss Jennie Chiado, executive secretary, San Francisco Psychoanalytic Institute, 2380 Sutter Street, San Francisco 15. WEst 1-4205.

San Diego County Medical Society and the Medical Department, 11th Naval District. Symposium on Clinical Medicine and Surgery. Sunday, June 5, 8:30 a.m. to 5:00 p.m. El Cortez Hotel, San Diego. *Contact:* Michael J. Feeney, M.D., program chairman, 3427 Fourth Ave., San Diego 3.

AUGUST MEETINGS

Gerontological Society, Inc., Mark Hopkins Hotel, San Francisco. August 7 through 12. *Contact:* Mrs. Marjorie Adler, administrative secretary, 660 S. Kingshighway Blvd., St. Louis 10.

Reno Surgical Society 10th Annual Conference. August 18, 19 and 20. The Mapes Hotel, Reno. *Contact:* Harry B. Gilbert, M.D., 275 Hill Street, Reno, Nevada.

American Association of Blood Banks, Jack Tar Hotel, San Francisco. August 21 through 26. *Contact:* John B. Alsever, M.D., secretary, 1211 W. Washington St., Phoenix, Arizona.

American Hospital Association, Civic Auditorium, San Francisco. August 27 through September 1. *Contact:* Mr. Maurice J. Norby, assistant director, 18 E. Division St., Chicago.

SEPTEMBER MEETINGS

Pacific Dermatologic Association Inc. 12th Annual Meeting. Empress Hotel, Victoria, British Columbia. September 2 through 4. *Contact:* Edward Ringrose, M.D., secretary, 2636 Telegraph Ave., Berkeley.

Oregon State Medical Society, Portland. September 7 through 9. *Contact:* Mr. Roscoe K. Miller, executive secretary, 1115 S. W. Taylor St., Portland 5, Oregon.

Nevada State Medical Association Annual Meeting. September 7 through 10. Stardust Hotel, Las Vegas. *Contact:* Nelson B. Neff, executive secretary, P. O. Box 2790, Reno, Nevada.

Postgraduate Assembly of Saint John's Hospital. September 8 through 10. 9 a.m. to 4 p.m., St. John's Hospital, Santa Monica. *Contact:* John C. Eagan, M.D., director, 1328 22nd St., Santa Monica.

Santa Barbara County Heart Association Physicians Symposium. September 17, 9:00 a.m. to 5:00 p.m., Biltmore Hotel, Santa Barbara. *Contact:* E. J. Hannon, executive director, 18 La Arcada Court, Santa Barbara.

California Society of Internal Medicine Annual Meeting, Yosemite. September 23, 24 and 25. *Contact:* Barbara E. Oulton, executive secretary, 350 Post St., San Francisco 8.

Washington State Medical Association Annual Convention. September 25 through 28. Olympic Hotel, Seattle, Washington. *Contact:* R. W. Neill, executive secretary, 1309 7th Avenue, Seattle, Washington.

Pan-Pacific Surgical Association 8th Intensive Surgical Congress, embracing all Surgical Specialties. September 28 through October 5. Honolulu, Hawaii. *Contact:* F. J. Pinkerton, M.D., director general, Suite 230, Alexander Young Building, Honolulu 13.

OCTOBER MEETINGS

American Society of Plastic and Reconstructive Surgery. Statler Hotel, Los Angeles, October 2 through 7. *Contact:* Thomas R. Broadbent, M.D., secretary, 508 E. S. Temple, Salt Lake City.

San Diego County Heart Association 10th Annual Symposium on Heart Disease. October 3 and 4. El Cortez Hotel. *Contact:* O. Martin Avison, 3545 Fourth Avenue, San Diego 3.

American Association for the Surgery of Trauma. Coronado Hotel, San Diego. October 5 through 7. *Contact:* William T. Fitts, Jr., M.D., secretary, 3400 Spruce St., Philadelphia 4.

Los Angeles County Heart Association 30th Annual Professional Symposium on Cardiovascular Diseases. October 5 and 6. Beverly Hilton Hotel, Beverly Hills. *Contact:* Los Angeles County Heart Association, 2405 W. 8th St., Los Angeles 57.

San Francisco Heart Association 30th Annual Postgraduate Symposium on Heart Disease. October 5 through 7. St. Francis Hotel, San Francisco. *Contact:* Mr. Lawrence I. Kramer, Jr., executive director, 259 Geary St., San Francisco 2.

Western Industrial Medical Association combined Meeting with 4th Western Industrial Health Conference. October 7 through 9. Jack Tar Hotel, San Francisco. *Contact:* Verne G. Ghormley, M.D., president, 3032 Tulare Street, Fresno 21.

American College of Surgeons, 46th Annual Clinical Congress, San Francisco. October 10 to 14. *Contact:* William E. Adams, M.D., secretary, 40 E. Erie St., Chicago 11.

American Cancer Society California Division Annual Meeting. October 13 through 15. Villa Hotel, San Mateo. *Contact:* Jane N. Lounsbury, assistant director, Field Services, 467 O'Farrell, San Francisco.

Kaiser Foundation Hospitals in Northern California Fourth Annual Symposium on Human Genetics. October 14 and 15. Fairmont Hotel, San Francisco. *Contact:* Martin A. Shearn, M.D., Director of Medical Education, 280 West MacArthur Blvd., Oakland.

California Academy of General Practice 12th Annual Scientific Assembly. October 16 through 19. Masonic Memorial Temple, San Francisco. *Contact:* William W. Rogers, executive secretary, 461 Market St., San Francisco 5.

Western Orthopedic Association Annual Convention. October 22 through 27. Hotel Del Coronado, Coronado. *Contact:* Mrs. Vi Mathieson, executive secretary, 354 21st St., Oakland 12.

St. Jude Hospital—Fullerton 2nd Annual Postgraduate Assembly. October 27 and 28. St. Jude Hospital. *Contact:* B. L. Tesman, M.D., chairman, St. Jude Hospital, Fullerton.

American School Health Association, San Francisco. October 30 through November 4. *Contact:* A. O. DeWeese, M.D., executive secretary, 515 E. Main St., Kent, Ohio.

American Public Health Association, San Francisco. October 31 through November 4. *Contact:* Berwyn F. Mattison, M.D., executive director, 1790 Broadway, New York 19.



THE PHYSICIAN'S *Bookshelf*

TECHNIC AND PRACTICE OF PSYCHOANALYSIS—Leon J. Saul, M.D., Professor of Clinical Psychiatry, Medical School of the University of Pennsylvania; Training Analyst, Philadelphia Psychoanalytic Institute; Psychiatric Consultant, Swarthmore College. J. B. Lippincott Company, Philadelphia, Pennsylvania, 1958. 244 pages, $8.00.

Dr. Saul's book is divided into two parts. The first and much the shorter part is headed "Approach," with a subhead "What is to be accomplished." In this part of the book the author discusses the nature and the goals of psychoanalytic treatment, together with a discussion of the attitudes of the analyst and a discussion of the basic theory of psychoanalysis. Dr. Saul has included a great deal of information in this section with which most psychoanalysts would agree. There are, however, certain statements with which many analysts would disagree. For example, some analysts are of the opinion that the works of Freud should be studied chronologically, which Dr. Saul evidently considers unwise.

In other parts of this section some of the illustrative material is presented in a way which raises a question as to whom Dr. Saul has addressed his book. This question will be discussed in more detail later in the review.

The second part of the book is titled "Practice, How to Accomplish Therapeutic Goals." In this section the author has included essays on several aspects of psychoanalytic technique, beginning with a discussion of the first interviews. There follows then a description and discussion of free association, the understanding of unconscious material and a chapter on dreams. He continues to include material concerning the conducting of the analysis, interpretations and other pertinent material. He concludes with a section on special problems, with illustrations of difficulties and failures in psychoanalysis. Finally, he discusses progress and termination of the analysis.

In his discussion of each of these subjects Dr. Saul states his position clearly, together with supporting reasons. In some instances his formulations probably would be accepted by most analysts, but there are exceptions. For example, he advises that in the initial interview the attempt be made to obtain specific anamnestic material, together with information concerning social factors in the life of the patient. Along with this, he points out the necessity for paying close attention to the associative material and the value of early formulation of the patient's principal difficulties. This reviewer agrees with the author's approach, but there are many analysts who do not.

From the title of the book it would appear obvious that the book is intended for students of psychoanalysis. This would include both students who are in training and those who are in practice. There is, I believe, some question as to how many teachers in psychoanalytic institutes will recommend the book for students in training. For psychoanalysts in practice the book is of interest because the material with which the author deals is of greatest importance. It is unlikely that most analysts in practice would agree completely with Dr. Saul's presentation.

The publication of this book raises an old question concerning the attempt by inadequately trained people to use technical information. It appears that many untrained individuals are willing to try to apply technical measures in the field of mental and emotional disorders who would not consider, for example, attempting intricate brain surgery without special training. While it is true that possible bad results would not be the same in both cases, there is a great deal of evidence that much harm and useless suffering are produced when such ill advised attempts are made.

The book then will be principally of value to students of psychoanalysis. It may also be useful as a source of general information to interested people in other fields.

CHARLES W. TIDD, M.D.

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THE MIDDLE EAR—Heinrich G. Kobrak; foreword by John R. Lindsay. The University of Chicago Press, 5750 Ellis Avenue, Chicago 37, Illinois, 1959. 254 pages, $15.00.

The remarkable, recent advances in preservation or improvement of hearing through surgery of the middle ear have created a need for a book such as Kobrak's. These new surgical methods require a considerable knowledge of anatomy, physiology and bio-acoustics; such information is available in Part I, in more complete detail, than in any book published to date.

Most of the otologists in this country are well aware of the late Dr. Kobrak's development of the motion picture camera as a tool for teaching and demonstrations as well as for research. He has used these skills in photography to illustrate sections on anatomy and physiology.

The important role that a knowledge of physiology plays in current reconstructive ear surgery is reflected in the fifty-four pages devoted to it. Though it is highly technical in some instances, it is presented in an easy-reading style and is most informative.

The chapter on testing is as modern as the rest of the book, but is limited to the audiometric characteristics of middle ear deafness. Considerable detail is given to the measurement and significance of bone conduction.

Part II is devoted to treatment. Men prominent in otology are the contributors—Lindsay on "Otosclerosis and Fenestration"; Rosen on "Mobilization of the Stapes"; Kobrak on "Treatment of Middle Ear Deafness by Prosthesis"; Wullstein on "Tympanoplasty, Audiology Indications, Technique and Results"; and Zoellner on "Plastic Surgery of the Sound-Conduction System of the Middle Ear." The one important person not included in this renaissance of ear surgery is Lempert, though his significant contributions have been adequately referred to by Lindsay.

There are 240 black-and-white illustrations and six color plates. The reference list is excellent.

This book is in a class by itself and should find its way into the library of every dedicated otolaryngologist.

SHIRLEY HAROLD BARON, M.D.

THE GOLDEN SCALPEL—Seymour Kern. The John Day Company, Inc., 210 Madison Ave., New York, N. Y., 1960. 248 pages, $3.50.

This novel pictures the physicians in Beverly Hills as doctors who look upon the practice of medicine as a short cut to wealth rather than a way of life and, incidentally, when they are not undermining each other they have habits like rabbits.

The story moves quickly with an undistinguished style and in fact even with minor grammatical errors but will undoubtedly appeal to those who still cling to the cloak and dagger approach of Bernard Shaw regarding malpractice. It is unfortunate that the author did not take the trouble to research the matter or question some knowledgeable doctor to become informed of the constructive steps taken locally in the very area of malpractice he describes.

For example, the statement is made that one doctor due to the connections of his brother, an influential politician, was one of the few who enjoyed staff membership in most of the hospitals in the city. Actually most doctors don't want membership on too many hospital staffs but it is well known that courtesy privileges are easily obtained in all hospitals by competent physicians and the closed shop exists to a very minor degree.

The cast of characters is almost as simple as a soap opera on radio or television with the good doctors wearing the white pants and the bad doctors the black pants. It would appear that the doctor leaning toward the left who is in favor of socialized medicine or who goes to work for a group or a clinic suddenly is transformed into a very good and competent doctor, whereas the solo practitioner is motivated by greed rather than the welfare of the patient and, therefore, is an incompetent doctor.

We are expected to accept as fact that doctors are capitalizing on an alleged shortage of doctors and yet on the other hand the jungle of cutthroat competition in the area described is such that the doctors involved spend much of their time undermining each other because there are too many doctors in the area.

The high point is the description of a vaginal hysterectomy —someone who has done one should have proofread this description—on a patient who is pregnant (whose problem actually had been an inability to become pregnant) and a point is made that the showmanship of the surgeon in doing it is such that he does a vaginal hysterectomy when an abdominal hysterectomy would have prevented removing the pregnant uterus.

The crazed husband shoots the surgeon in the abdomen and the surgeon is taken to the hospital but operated on, with his wife's consent, by an incompetent rather than by his friend in the white pants, since his friend has been tossed off the staff of the hospital because of his liberal leanings. Subsequently he presumably dies of postoperative hemorrhage while his friend who could have saved him stands by in his tweed suit presumably not having guts enough to take over from the incompetent surgeon.

Other facets brought out in the novel deserve some comment. Bland stipulation or acceptance of generalized anti-Semitism will come as a surprise to the physicians in Los Angeles who know that it is practically nonexistent here.

No one with integrity would ignore evils inherent in some proprietary hospitals and staffs who seem more preoccupied with their own financial welfare than the care of the patient.

It's easier, however, to throw rocks at the window and then run for the bushes than to tell the whole story.

There are hospitals which exist for the welfare of the patient and are staffed by men of integrity devoted to the pursuit of excellence in the care of patients and in research as well.

Recently a general practitioner from Brea, California, was buried. He was not the old time family doctor who worked hard but died a pauper and had the whole town turn out for his funeral. He was an intelligent and dedicated practitioner who achieved reasonable wealth incident to taking good care of his patients. He was a man with a three hundred horsepower motor in a twenty horsepower chassis and gave much of himself to good causes in the field of medicine as well as in civic enterprises. He worked for his friends in the political field and was active in organized medicine as well. He did not have to buy good public relations; he deserved them. He numbered among his friends senators and vice-presidents as well as common men. Medicine to him was not a way to wealth but a way of life. The day of his funeral all the stores in Brea closed.

This book will undoubtedly appeal to the group preoccupied with undermining the medical profession. I would predict, however, that the book will produce a smaller splash than others of its type about the doctor business.

Wm. F. Quinn, M.D.

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KINESIOLOGY AND APPLIED ANATOMY—The Science of Human Movement—Philip J. Rasch, Ph.D., C.C.T., F.A.C.S.M., Associate Professor of Physical Medicine and Rehabilitation, College of Osteopathic Physicians and Surgeons, Los Angeles, California. Roger K. Burke, Ph.D., F.A.C.S.M., Associate Professor of Physical Education, Occidental College, Los Angeles, California. Lea & Febiger, Philadelphia, 1959. 456 pages, $7.50.

The science of kinesiology, the knowledge of movements involving function of muscle, and physiology of joint systems are of unquestioned importance to medical personnel. In treating this subject it has always been most difficult to capture the imagination and interest of the reader. The authors, however, have succeeded in formulating a most attractive and interesting, yet complete, treatment of this difficult subject. It is written for surgeons, physiatrists, physical and occupational therapists, and teachers of physical education who wish better to understand some of the fundamental principles of muscle and joint systems.

A valuable history of the subject is first given with reference to such traditional authorities as Galvani, Duchenne, Borelli, Weber, Braune, Fischer, R. Fick, Sherrington, and Darwin. The enormous contributions of these individuals and others to the field of kinesiology is described. Each chapter is followed by a very complete bibliography.

A chapter entitled, "The Structure and Action of Striated Muscle" is very skillfully handled. The histology, neuroanatomy and electrophysiology of muscle are presented. Modes of muscular activity demonstrated by the electromyogram are described.

Many purely mechanical and physical considerations, such as the acceleration of the body due to gravity and other forces are explained. A section on kinematics describes the effects of rotary motion. Newton's laws of motion, power, and other physical considerations are explained.

Motions of the body and its parts are then described in terms of the center of gravity and leverage systems about the body.

Of interest to coaches and teachers of physical education are sections on posture and the application of kinesiology in athletics.

The book does a great deal to provide a basic explanation for the way in which the body uses its muscles, leverage systems and joint systems to accomplish certain tasks, or movements. Knowledge of such principles is essential to those engaged in reconstructive and rehabilitative work on the musculoskeletal system.

The book is well illustrated throughout.

J. Robert Close, M.D.

MICROBIAL VARIATION—Edited by V. D. Timakov, member of the Academy of Medical Sciences of the U.S.S.R. Translated from the Russian by G. H. Beale. Pergamon Press, Inc., 122 East 55th Street, New York 22, N. Y. 202 pages, $6.50.

The purpose behind the immense effort involved in the translation of this book is not at all clear to this reviewer. The major fraction of the material presented is a confused mixture of dialectical materialism, pseudoscience, and Soviet genetics of the Lysenko variety. It must be admitted that many of the thoughts and opinions expressed in this work have at one time or another been held by microbiologists in other countries, but have now been quite uniformly discarded.

Not all of the material presented is worthless, however. For instance, the data presented in the arguments concerning losses of virulence appearing conjointly with the development of (induced) antimicrobial resistance are similar to results achieved in other parts of the world. It is regrettable that in these sections, however, as well as in the rest of the presentation the references are almost exclusively to the Soviet literature. This is understandable for the major fraction of the material cited above, but seems a significant omission when considered for the sections dealing with induced changes in virulence alone.

In short, this book would seem worthwhile for the microbiologist interested in an exhaustive treatise on current Soviet thought and research on directed microbial variation with its implications for the development of strains of diminished virulence for vaccines, or strains of increased virulence for less peaceful uses. For the uninformed reader who wishes to become better acquainted with this subject, this reviewer would suggest that he delay reading this work until he acquires a grounding in the truly scientific aspects of microbial variation.

HAROLD J. SIMON, M.D.

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CLINICAL PSYCHOPATHOLOGY — Kurt Schneider, Professor, University of Heidelberg, Germany. Translated by M. W. Hamilton, B.A. (Lit. Hum.) Oxon., University of Manchester, Dept. of Psychiatry, The Royal Infirmary, Manchester, England. Preface by E. W. Anderson, M.D., M.Sc., F.R.C.P., D.P.M., Professor, University of Manchester, Dept. of Psychiatry, The Royal Infirmary, Manchester, England. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, N. Y., 1959. 173 pages, $4.50.

This volume is a translation based on the fifth revised edition of the original *Klinische Psychopathologie* by Kurt Schneider, who retired as Professor of Psychiatry at the University of Heidelberg in 1955. The translation has been done by M. W. Hamilton of the Department of Psychiatry, University of Manchester.

A preface to the book has been written by Professor E. W. Anderson, also of the University of Manchester, which serves an exceedingly useful purpose for readers in the United States who, like this reviewer, are not entirely familiar with the details of the development of psychiatry in Germany. Anderson points out that Kurt Schneider has been one of the outstanding figures in European psychiatry for more than 40 years. Schneider's psychiatric thinking comes under the general heading of Kraepelinian tradition, and he was particularly influenced by Karl Jaspers who ". . . laid the foundations of the (so-called) school of 'Phenomenology'." The author of the preface then continues to discuss the phenomenologic approach and shows something of the relationship with other schools of thought.

Upon turning to the content of the book, one notes first that Schneider begins with a classification of clinical material and a definition of illness. It is immediately apparent that his approach is markedly different from that commonly taught and used in the United States. His classification certainly has the advantage of simplicity, since there are only two principal groups. The first includes "Abnormal Variations of Psychic Life." Group two is labelled "Effects of Illness (and Defective Structure)."

In group one he lists three items: Abnormal intellectual endowment, abnormal personality and abnormal psychic reaction. In group two are included the psychoses. Group two is further subdivided to indicate the somatic etiology and the psychic symptomatology. For all of the conditions except psychothymia (manic-depressive psychoses) and schizophrenia the organic etiological basis is indicated. For the two exceptions, psychothymia and schizophrenia, the author has placed question marks to indicate the unknown somatic background.

Schneider makes it very clear that he considers illness to exist only in connection with the presence of morbid organic change. He states that he holds to this in spite of the fact that it has not been confirmed by organic pathological investigations.

The author then continues to discuss the items he has designated in his classification. It is in this main section of the book that the reader is able to see the beautiful skill developed by Schneider in his description of the observable elements in mental illness. Throughout the text there are indirect references to the mechanisms by which these elements, symptoms for example, have been brought about. In several such instances he refers to psychoanalytic concepts.

For one who has been brought up to use the dynamic approach, the book appears to have little to offer beyond a demonstration of careful observation of the signs and symptoms of mental illness. Such a reader misses a framework on which to place the observed data. It is possible that Schneider has such a framework, but if so, this reviewer has not been able to perceive it in this book. One gets the feeling that if it were possible to observe Schneider working with patients, the book would be much more meaningful.

It is difficult for the reviewer to recommend the book other than to psychiatrists who wish to have some understanding of the work of an important European in the field.

CHARLES W. TIDD, M.D.

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PRACTICE OF CLINICAL CHILD PSYCHOLOGY—Alan O. Ross, Ph.D., Chief Psychologist, Pittsburgh Child Guidance Center, and Adjunct Associate Professor of Psychology, University of Pittsburgh, Pittsburgh, Pennsylvania. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, New York, 1959. 275 pages, $5.75.

At the present time there is still a considerable struggle going on between psychiatrists and psychologists concerning their various roles with the patient. While this struggle is minimal in the child field, this book will serve to express some of the problem. It is a very calm expression of the role of the clinical psychologist working with children and for the most part, by its lucidity, clarifies the differing roles that psychiatrists and psychologists can have. The reader will be grateful for the historical presentation as well as for a definition of various jobs in keeping with the functions needed in a clinical operation.

The most serious criticism to be leveled against the book concerns the minimization of the research role of the psychologist. Those of us in psychiatry who are often dependent on psychologists, and certainly look to them for assistance in defining problems, will feel that Dr. Ross has not spent enough time in considering this aspect. However, there is an excellent description of the testing function of the psychologist and of the various tests which can be employed. The latter should be most helpful to any physician in looking for the kind of results he should expect from a psychologist working with children.

HENRY WORK, M.D.

INTRODUCTION TO COLPOSCOPY—A Diagnostic Aid in Benign and Preclinical Cancerous Lesions of the Cervix Uteri—Karl A. Bolten, M.D., Gynecologist and Research Associate, Dept. of Pathology, Subdivision Obstetric and Gynecologic Pathology, University of Oklahoma, School of Medicine. Cooperating in Pathology, William E. Jaques, M.D., Chairman and Professor of Pathology, University of Oklahoma, School of Medicine; with Forewords by Joe Vincent Meigs, M.D., and Daniel W. Goldman, M.D. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, N. Y., 1960. 76 pages, $7.75.

This slender volume is an effort to revive interest in a diagnostic procedure which many gynecologists abandoned 25 to 30 years ago, largely because of the difficulty in interpretation of the bizarre patterns seen on the distal end of the cervix. Despite the author's enthusiasm for the colposcope, it seems unlikely that it will prove more helpful than conization of the cytologically positive cervix to detect carcinoma in situ.

However, for those with a desire to know more about the colposcope and how to use it, Bolten's monograph can be recommended. In addition to the technical aspects, there are descriptions of what one may see in the presence of various benign and malignant processes involving the cervix and vagina. Approximately half the book is devoted to illustrations—of the instrument and accessories, copies of drawings from an atlas by Mestwerdt, colored photographs of cervices (mostly contributed by Wespi from Switzerland), and a few histopathologic photomicrographs. There is also a list of 127 references, but this contains many duplications, owing to the unconventional manner in which reference numbers are used throughout the text.

This book is beautifully printed on paper of excellent quality, and for the most part the illustrations are very good. Some of the black and white photomicrographs leave something to be desired, but this appears not to be the fault of the printer. The price seems high for so few pages, but one must presume that illustrations in color are costly.

C. E. McLennan, M.D.

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MOLOY'S EVALUATION OF THE PELVIS IN OBSTETRICS—Second Edition — Charles M. Steer, M.D., Med.Sc.D., F.A.C.S., F.A.C.O.G., Associate Professor of Clinical Obstetrics and Gynecology, College of Physicians and Surgeons, Columbia University, and the Sloane Hospital for Women. W. B. Saunders Company, Philadelphia, 1959. 131 pages, $4.00.

The second edition of this outstanding monograph has been very well written by Dr. Steer. The anatomy of the pelvis and the classification of the various types of pelves are very clearly and very accurately described. A thorough consideration of the details of the clinical examination of the pelvis is included.

In his discussion of the significance and usefulness of an accurate knowledge of the pelvis Dr. Steer takes a very realistic view. He describes in detail the mechanism of labor and in particular the type of engagement noted in the various types of pelves. He emphasizes, for example, the increase in posterior positions with android and anthropoid pelves. From this he proceeds logically to a discussion of the treatment of pelvic arrest with forceps in the different types of pelves and gives an excellent discussion of the proper forceps maneuvers to be employed.

Dr. Steer states that x-ray pelvimetry should be performed only in those cases in which clinical evidence of disproportion exists and that this will be true in not over 10 per cent of patients. He feels that pelvimetry should be obtained after the onset of labor and describes the technique to be employed. He wisely states that x-ray examination provides only a statistical statement of the probability of serious arrest and that this can then be used as one factor in determining the best method of delivery.

The summary at the end of the last chapter is excellent. Here the author mentions the facts that some patients with high degrees of disproportion do deliver spontaneously and that in some clinics pitocin infusion is being used to overcome disproportion. However, he cites possible dangers to the child under these circumstances. On the other hand, he decries the excessive use of cesarean section when one is not certain that disproportion exists and states that use of x-ray pelvimetry is the only way to be certain.

In this second edition Dr. Steer has amplified the discussion of the use of forceps in overcoming arrest and makes many very helpful and practical suggestions. The number of patients who have been surveyed has been greatly increased during the eight years which have elapsed since the publication of the first edition. This permits a more detailed consideration and more significant conclusion regarding the probability of difficult delivery with a given amount of disproportion.

In my opinion this is an excellent monograph which should be thoroughly perused by all men in training in obstetrics and gynecology. It makes interesting reading too for those of more experience who must critically review periodically their own feelings about the principles of management of the patient having a difficult labor.

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PSYCHIATRY: DESCRIPTIVE AND DYNAMIC—Jackson A. Smith, M.D., F.A.C.P., Clinical Director, Illinois State Psychiatric Institute, Chicago, Illinois. The Williams & Wilkins Company, Baltimore 2, Maryland, 1960. 342 pages, $7.00.

The increasing burden of knowledge of psychological behavior and the application of medical techniques to the field of psychiatry leads to two major issues. One is that of communication of this knowledge to the nonpsychiatric physician, and the other a real difficulty in trying to translate such knowledge into more general terms. This book represents a further attempt to bridge these gaps and to lay out as clearly as possible the findings of psychiatry so that they may be utilized by any practitioner.

The text includes good explanations of the history and the schools of psychiatry, as well as a clear, current exposition of psychodynamics and the psychiatric examination. The bulk of the material of the book is taken up with the various reactions which are seen in current psychiatric practice. It is felt that the author has somewhat more of an emphasis on hysteria and hysterical phenomena than he does on other reactions, but in general there are clear pictures of schizophrenia, of the affective reactions, and certain neurotic pictures. It is felt that there could be an expansion, for the purpose of the book, of the material concerned with the psychophysiological disturbances, since such psychosomatic reactions make up a large bulk of nonpsychiatric practice.

There is, however, a good section on child psychiatry for the general practitioner.

One criticism of this book is found in the rather abrupt manner in which all topics are presented. The writer is extremely forceful, and sometimes his forcefulness leads to an overstatement of dynamic material in comparison to a more conservative approach. There is obvious evidence that the writer is not impressed with many dynamic formulations, and the thinly veiled cynicism with which his ideas are expounded sometimes seems out of place in a general textbook.

With these limitations, however, the material, particularly in certain areas, is good. If, as has been noted, the psychodynamics of the psychosomatic conditions could be expanded, it would become indeed a rather valuable textbook.

Henry H. Work, M.D.

INSTRUCTIONAL COURSE LECTURES—Volume XVI —The American Academy of Orthopaedic Surgeons—Editor, Fred C. Reynolds, M.D., St. Louis, Missouri. The C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3, Missouri, 1959. 334 pages, illustrated, $16.00.

The perennial classic again brings to the reader excerpts from the 1959 instructional course lectures of the American Academy of Orthopaedic Surgeons. Although, for practical purposes, all the lectures could not be given, those selected were excellent in content, thorough, and of timely interest.

The first section, a symposium on athletic injuries, ignores the various methods of treatment which have been known and well documented. Emphasis wisely is on diagnosis and on prevention of injuries, both by prophylactic exercise programs and the fitting of the athlete to the sport. Both factors are described in excellent fashion and with numerous tables and sketches for illustration. This symposium alone makes this volume a valuable adjunct to all who see and treat athletes.

The course on the anatomy of the hand and its injuries provides an excellent review, particularly to those who may infrequently need an easily read and short essay on this subject.

A new concept on the pathogenesis of Dupuytren's contracture is offered by Dr. Luck. By dividing the disease into three stages, specific treatment for each stage may be offered. Dr. Luck's large series and results are impressive and worthy of study to all students of the hand.

Dr. Riordan, in one review, brings together the classical procedures for treating of the paralytic hand. In addition, a new technique is offered. This again is a must to all who are exposed to this problem.

The review of the congenital club foot by Dr. McCauley summarizes past developments in this often difficult field. A new concept in medical release is offered, which in detail describes the rather massive release with appropriate and lucid descriptions of pitfalls and their avoidance. Complementing the latter is the procedure by Heyman, et al., on surgical correction of resistant metatarsus varus. The procedure and example are well illustrated and the results impressive.

A most needed contribution is offered by Dr. Heyman, et al., on the subject of congenital convex pes valgus, or the so-called vertical talus. This problem, more common than suspected, is a most difficult one to treat, since conservative measures have consistently failed. The English literature has been sorely lacking in discussion and treatment, and this needed article brings together diagnosis and surgical treatment, with an extensive series to support it.

Dr. Crice reports further on his subtalar arthrodesis. In addition, this article gives a good review of valgus deformities regardless of cause.

In the symposium on knee injuries, and in addition to a review of this problem, Dr. Kaplan's views on the etiology and pathogenesis of discoid menisci deserve this wider distribution and will no doubt upset many a cherished tradition.

In the symposium on the spine, the pressing problem, both medical and economic, of the industrial back is succinctly presented. A sobering thesis, with overtones in many directions in this day of paternal government, is the flat assertion of the relationship of disability and compensation. This essay would be illuminating to many outside of the medical profession.

Dr. Schmidt ably brings his vast experience and knowledge of the treatment of the scoliotic spine in an essay which again should be required reading of all who must care for this problem.

The large series of Young and Love of the Mayo Clinic, comparing excision of the disc with discectomy and fusion, brings this problem again to scrutiny. Their impression of the superiority of the combined procedures appears to be tipping the pendulum away from the swing of discectomy alone.

C. W. Goff reviews the methods of estimating growth of extremities in treatment of unequal extremities. Of interest is the success of some of the less "scientific" method. Electromyelography is presented less as a review and more as a diagnostic tool for orthopedists, who have been slow to use this definitive method of diagnosis in puzzling problems. Of particular note is its value in differentiating primary myopathies from lower motor neuron lesions.

The ever-present divergence of views on the uses of hip prostheses are again raised in the last symposium. It appears that all views are staunchly defended. The reader will most probably find a defense of his own views here and will not be persuaded to change them.

As is true each year, this volume deserves its place on the active shelf of the orthopedist's library. It will also serve ancillary branches of medicine whose interests overlap in any of the described symposia.

MERRILL C. MENSOR, M.D.
JOHN J. DEMAS, M.D.

* * *

MEDIEVAL AND RENAISSANCE MEDICINE—Benjamin Lee Gordon, M.D., F.I.C.S. Philosophical Library, 15 East 40th Street, New York 16, N. Y., 1959. 843 pages, $10.00.

This thick book (some 800 pages), dealing in a general way with medieval and Renaissance medicine, makes remarkably good and instructive reading. After a few introductory chapters to set the stage, the plan of each chapter is to develop a topic in general and to conclude with a series of sketches of individual physicians. Thus the volume is useful as a general history as well as a reference book to particular physicians; it is well documented with references to each chapter. There are an index and numerous illustrations. It is a book which every doctor will find useful and every medical student should read.

ARTHUR L. BLOOMFIELD, M.D.

* * *

RADIOLOGIC EXAMINATION OF THE SMALL INTESTINE—2nd Edition—Ross Golden, M.D., Visiting Professor of Radiology, University of California at Los Angeles; Professor Emeritus of Radiology, Columbia University; formerly, Director of Radiology, The Columbia-Presbyterian Medical Center, New York City. Charles C. Thomas, Publisher, Springfield, Ill., 1959. 560 pages, $28.50.

This monograph is divided into 29 chapters which contain material based largely on the author's extensive experience at the Columbia-Presbyterian Hospital in New York City. The sections on anatomy, embryology and physiology are commendable and should be of use to radiologists and other clinicians. The sections on the normal small intestine, especially that of the infant, are useful but not as thorough as in Caffey's textbook. The succeeding chapters deal with many diverse disorders, the conclusions in some of them being based apparently on the examination of less than half a dozen cases. The differential diagnostic features suffer understandably from the fact that there is no marked specificity to the roentgen findings in many of the different small bowel conditions discussed.

The chapters on peritoneal adhesions and intestinal ileus are useful, but perhaps more thoroughly covered in Frimann-Dahl's monograph.

Amongst the conditions discussed with ability and adequate illustrations are regional enteritis, parasitic infections and neoplasms.

The format of the book is pleasing; the illustrations are of good quality and the references and index adequate.

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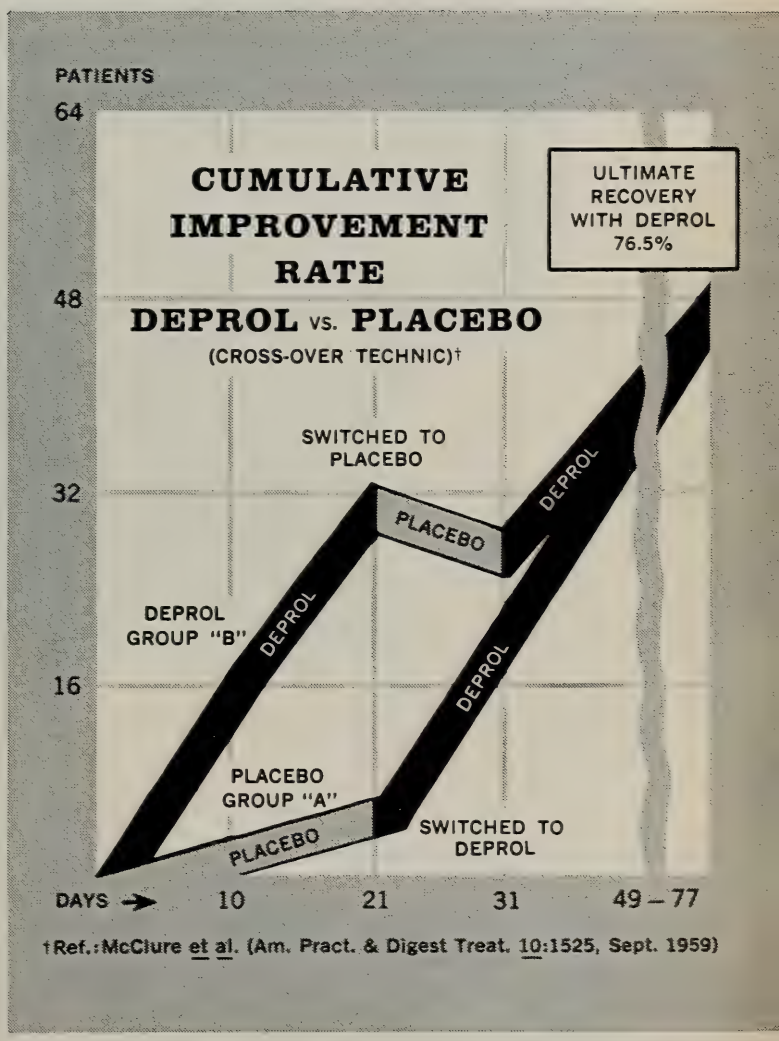
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†Ref.: McClure et al. (Am. Pract. & Digest Treat. 10:1525, Sept. 1959)

BIBLIOGRAPHY *(11 clinical studies, 764 patients):*

1. Alexander, L. (35 patients): Chemotherapy of depression – Use of meprobamate combined with benactyzine (2-diethylaminoethyl benzilate) hydrochloride. J.A.M.A. 166:1019, March 1, 1958. **2.** Bateman, J. C. and Carlton, H. N. (50 patients): Meprobamate and benactyzine hydrochloride (Deprol) as adjunctive therapy for patients with advanced cancer. Antibiotic Med. & Clin. Therapy 6:648, Nov. 1959. **3.** Bell, J. L., Tauber, H., Santy, A. and Pulito, F. (77 patients): Treatment of depressive states in office practice. Dis. Nerv. System 20:263, June 1959. **4.** Breitner, C. (31 patients): On mental depressions. Dis. Nerv. System 20:142, (Section Two), May 1959. **5.** Landman, M. E. (50 patients): Choosing the right drug for the patient. Submitted for publication, 1960. **6.** McClure, C. W., Papas, P. N., Speare, G. S., Palmer, E., Slattery, J. J., Konefal, S. H., Henken, B. S., Wood, C. A. and Ceresia, G. B. (128 patients): Treatment of depression—New technics and therapy. Am. Pract. & Digest Treat. 10:1525, Sept. 1959. **7.** Pennington, V. M. (135 patients): Meprobamate-benactyzine (Deprol) in the treatment of chronic brain syndrome, schizophrenia and senility. J. Am. Geriatrics Soc. 7:656, Aug. 1959. **8.** Rickels, K. and Ewing, J. H. (35 patients): Deprol in depressive conditions. Dis. Nerv. System 20:364, (Section One), Aug. 1959. **9.** Ruchwarger, A. (87 patients): Use of Deprol (meprobamate combined with benactyzine hydrochloride) in the office treatment of depression. M. Ann. District of Columbia 28:438, Aug. 1959. **10.** Settel, E. (52 patients): Treatment of depression in the elderly with a meprobamate-benactyzine hydrochloride combination (Deprol). Antibiotic Med. & Clin. Therapy 7:28, Jan. 1960. **11.** Splitter, S. R. (84 patients): The care of the anxious and the depressed. Submitted for publication, 1959.

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Statistics Prove Sex Hormones Aid Victims of Breast Cancer

(Continued from Page 65)

in which menopause had occurred. Before menopause, estrogens may augment breast cancer.

The subcommittee, on the basis of the study, recommended estrogens as the agents of choice after the fourth postmenopausal year.

The findings refuted the idea held by some that estrogens should not be used until 10 years after menopause, the researchers said.

The study also debunked the belief that androgens were of greater therapeutic value at all ages for cancer involving the bones. It showed that estrogens and androgens were of equal value in the treatment of bony involvement.

The belief that both types of hormones become more effective by reason of a trend in aging women to develop cancers of a less aggressive pattern was not borne out by the study.

It was found that the older woman realizes longer survival than the younger, on the average, but she also tolerates the presence of clinically detectable cancer for a greater fraction of that increased life span.

The effectiveness of hormonal treatment was influenced by the age of the patient. In general, the

(Continued on Page 72)

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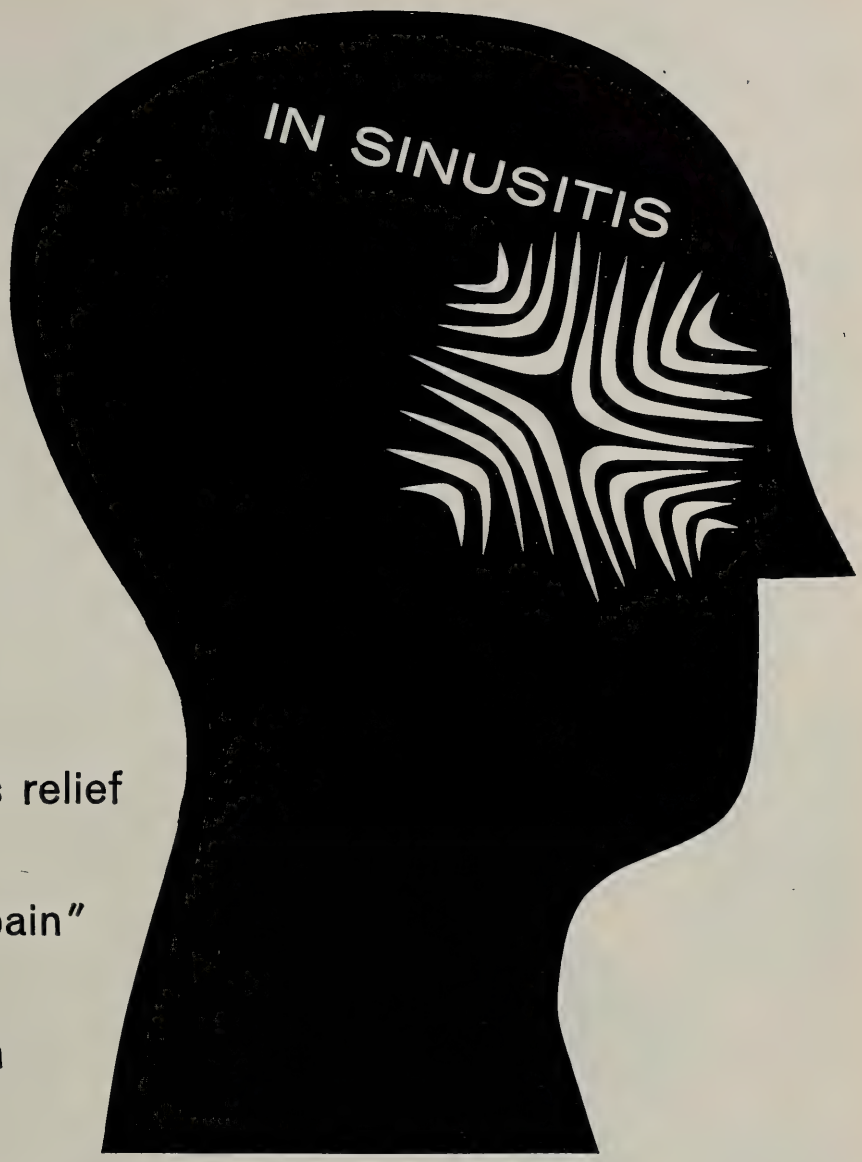
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Statistics Prove Sex Hormones Aid Victims of Breast Cancer

(Continued from Page 70)

probability of suppressing the cancer increased in rough proportion to the passage of years, with two exceptions.

In the fifth decade, and after the age of 80, the effectiveness of the androgens decreased from the level of the previous decade. In terms of endocrinologic age, the estrogens reached a plateau of effectiveness after the fourth postmenopausal year and the androgens after the eighth.

The study also showed:

—The younger the patient is at the time of recognition and treatment of her primary disease, the longer a recurrence is postponed.

—The older the patient was at the time steroid treatment was started, the more likely was a regression to occur.

—In patients with soft tissue lesions, regressions occurred significantly more often after estrogen treatment.

—Estrogens and androgens must both be credited with a greater degree of potency against cancer than previously accorded them.

Other members of the subcommittee are Drs. Alfred Gellhorn, New York; B. J. Kennedy, Minneapolis, and Samuel G. Taylor, III, Chicago.



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Malignant Tumors Number Two Killer of Children

Malignant tumors cause one out of every eight or nine child deaths in this country, according to an article in a recent issue of the *Journal of the American Medical Association.*

"The importance of malignancy in childhood is growing," the article said. ". . . malignancy now represents the second most frequent cause of death, having been third in 1945."

Dr. W. B. Kiesewetter, surgeon-in-chief, Children's Hospital of Pittsburgh, and Dr. Edward J. Mason, teaching fellow in surgery, University of Pittsburgh School of Medicine, reported on 404 cases of malignant disease in children between 1 and 14 years of age.

The cases represented more than one 1 per cent of total hospital admissions during a six and one-half year period.

It is significant, they wrote, that while there has been a marked decrease in over-all mortality in the decade 1945-55, there has been an increase in the incidence of malignant neoplasms and congenital malformations. Correspondingly, they said, there has been a relative increase in the importance of malignant neoplasms in the over-all death rate.

The two surgeons said their study showed that "a child is much more vulnerable to malignant disease under the age of five years than thereafter."

"Negroid and sinoid children appear to be far less vulnerable to malignancy than caucasoid," they said.

"In spite of the high percentage of negroid children seen as outpatients in the hospital, 391 of the 404 total tumors were in caucasoid children.

"In this series, there was an approximate three-to-two predominance of males over females, with malignant disease being found in 230 males as against 174 females."

Leukemia and lymphoma were the major killers, they reported, accounting for 42 per cent of the deaths.

"Of the total group of 404, 317 were dead at the time of follow-up survey, an over-all mortality of 80 per cent," they said. ". . . 75 per cent of those who died from their malignant disease were dead at the end of the first 12 months.

"Cancer certainly is an early killer in childhood if it is not completely cured initially."

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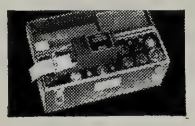
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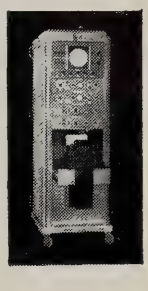
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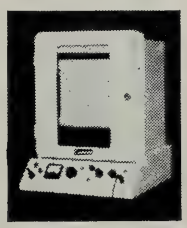


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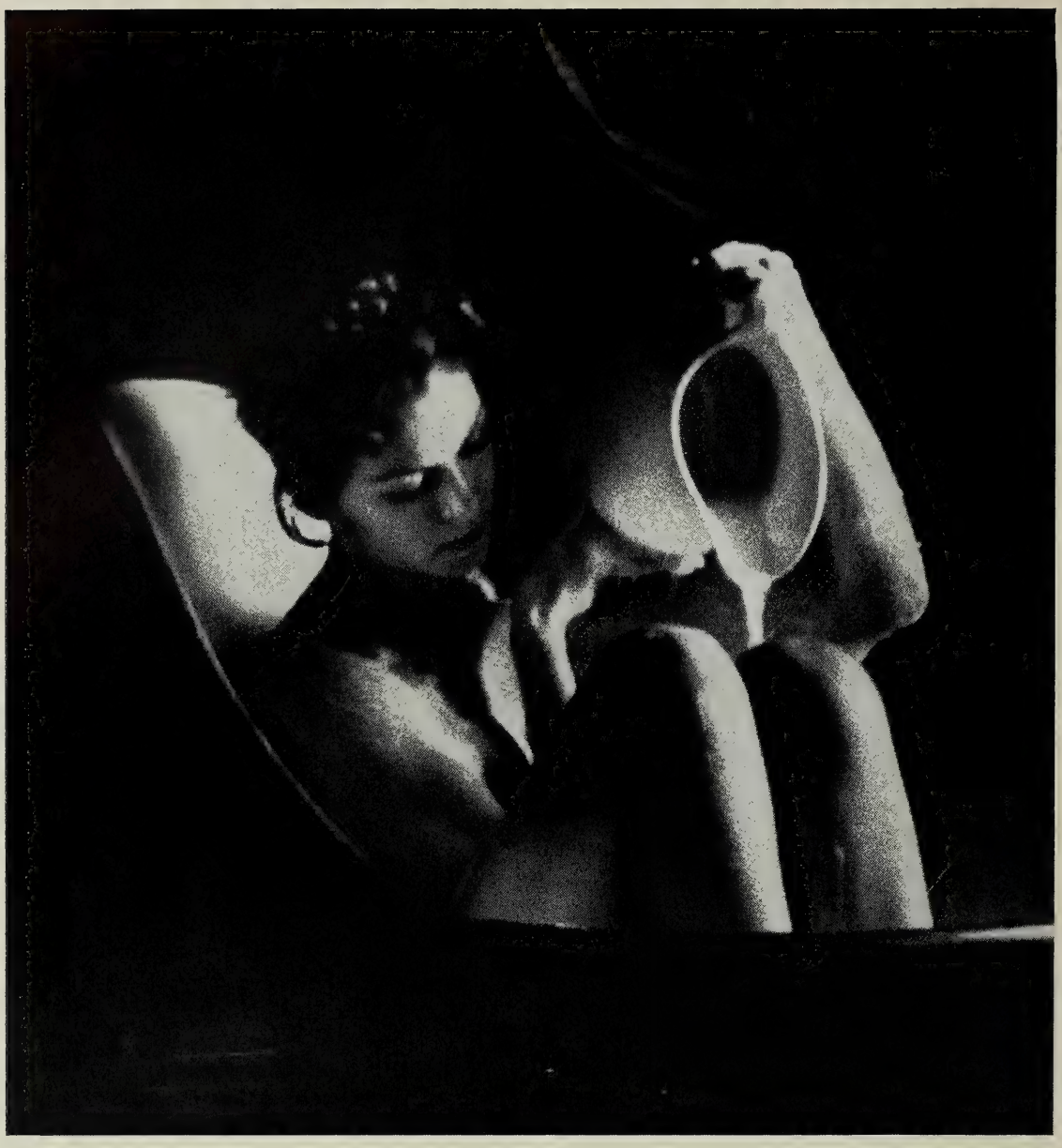
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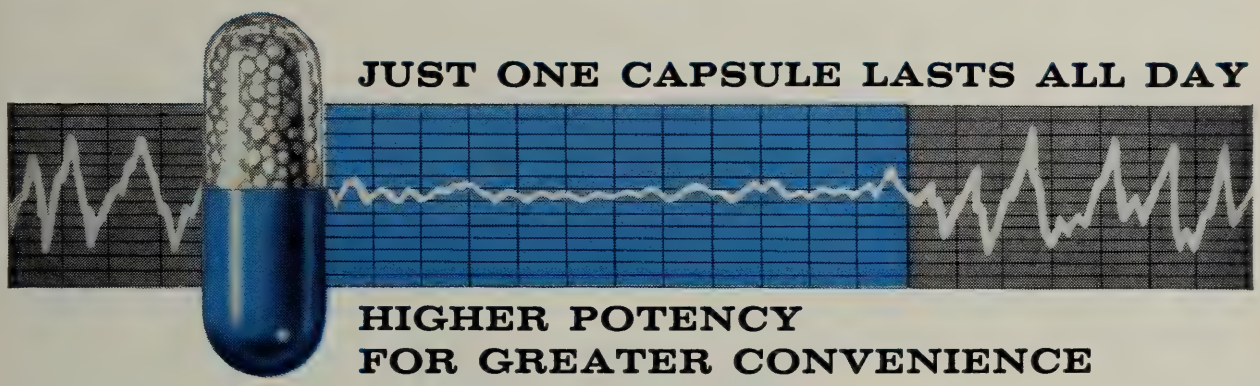
1. Goodman, L.S. and Gilman, A.: The Pharmacologic Basis of Therapeutics, MacMillan, 1955.

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BOOKS RECEIVED

Books received by CALIFORNIA MEDICINE *are acknowledged in this column. Selections will be made for more extensive review in the interests of readers as space permits.*

ATLAS OF NEUROSURGICAL TECHNIQUES, AN—James L. Poppen, M.D., Neurosurgeon: The Lahey Clinic, New England Baptist Hospital, and New England Deaconess Hospital. W. B. Saunders Company, Philadelphia, 1960. 522 pages, $28.00.

ANATOMY—A Regional Study of Human Structure—by Ernest Gardner, M.D., Wayne State University; Donald J. Gray, Ph.D., Stanford University; and Ronan O'Rahilly, M.Sc., M.D., Wayne State University. Illustrated by Caspar Henselmann. W. B. Saunders Company, Philadelphia, 1960. 999 pages, $15.00.

BASIC OFFICE DERMATOLOGY—Stuart Maddin, M.D., Fellow, American Academy of Dermatology and Syphilology; Member of the Medical Staff of the Vancouver General Hospital, Vancouver, British Columbia; Julius L. Danto, M.D., Fellow, American Academy of Dermatology and Syphilology; Member of the Medical Staff of the Vancouver General Hospital; and William D. Stewart, M.D., F.R.C.P. (C), Clinical Instructor (Dermatology) Department of Medicine, Faculty of Medicine, University of British Columbia. With Forewords by Dr. R. F. Farquharson, M.D., University of Toronto, and M. B. Sulzberger, M.D., New York University. Charles C. Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois, 1960. 308 pages, $11.75.

BIOCHEMISTRY OF HUMAN GENETICS — a Ciba Foundation Symnosium. Editors for the Ciba Foundation, G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Cecilia M. O'Connor, B.Sc. Little, Brown and Company, Boston, Massachusetts, 1959. 347 pages, $9.50.

CARDIAC AUSCULTATION—Including Audio-Visual Principles. Second Revised Enlarged Edition. J. Scott Butterworth, M.D., Associate Professor of Medicine, New York University Post-Graduate Medical School; Maurice R. Chassin, M.D., Associate Professor of Clinical Medicine, New York University Post-Graduate Medical School; Robert McGrath, M.D., Associate Professor of Clinical Medicine, New York University Post-Graduate Medical School; and Edmund H. Reppert, M.D., Assistant Professor of Clinical Medicine, New York University Postgraduate Medical School. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, N. Y., 1960. 102 pages, $6.25.

CIBA FOUNDATION STUDY GROUP NO. 3—CANCER OF THE CERVIX (Diagnosis of Early Forms), in honor of Prof. Dr. C. Kaufmann. Editors for the Ciba Foundation —G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Maeve O'Connor, B.A. Little, Brown and Company, Boston, Mass., 1959. 114 pages, with 27 illustrations, $2.50.

CLINICAL OBSTETRICS AND GYNECOLOGY, Vol. 2, No. 4—A Quarterly Book Series—Symposium on Cesarean Section edited by Edwin J. De Costa, M.D.; and Symposium on Advances in Gynecologic Surgery edited by S. B. Gusberg, M.D. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, 49 East 33rd Street, New York 16, N. Y., 1959. 1228 pages. $18.00 a year for four consecutive numbers issued quarterly (subscription only).

CURRENT APPROACHES TO PSYCHOANALYSIS. Edited by Paul H. Hoch, M.D., Dept. of Mental Hygiene, State of New York; College of Physicians and Surgeons, Columbia University, New York City; and Joseph Zubin, Ph.D., Dept. of Mental Hygiene, State of New York; Dept. of Psychology, Columbia University, New York City. (The Proceedings of the Forty-Eighth Annual Meeting of the American Psycho-Pathological Association, Held In New York City, February 1958). Grune & Stratton, 381 Park Ave. South, New York 16, N. Y., 1960. 207 pages, $6.50.

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CURRENT THERAPY—1960—Latest Approved Methods of Treatment for the Practicing Physician. Edited by Howard F. Conn, M.D. W. B. Saunders Company, Philadelphia, 1960. 808 pages, $12.00.

DIABETES—With a Chapter on HYPOGLYCEMIA—by 54 Authors. Edited by Robert H. Williams, M.D., Executive Officer and Professor of Medicine, University of Washington; Physician-in-Chief, University Hospital, Seattle. Paul B. Hoeber, Inc., Medical Division of Harper & Brothers, 49 East 33rd Street, New York 16, N. Y. 1960. 793 pages, with 192 illustrations, 23 in full color, $20.00.

DIAGNOSIS AND TREATMENT OF TUMORS OF THE CHEST—Sponsored by the American College of Chest Physicians. Edited by David M. Spain, M.D. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, N. Y., 1960. 371 pages, $14.75.

DOCTOR ENJOYS SHERLOCK HOLMES, A—Edward J. Van Liere. Vantage Press, Inc., 120 W. 31st Street, New York 1, N. Y., 1959. 141 pages, $3.00.

DRUGS OF CHOICE, 1960-1961—Walter Modell, M.D., Editor; Director, Clinical Pharmacology, and Associate Professor of Pharmacology, Cornell University Medical College; Attending Physician, New York Veterans Administration Hospital. The C. V. Mosby Company, 3207 Washington Blvd., St. Louis 3, Mo., 1960. 958 pages, $13.50.

EMERGENCIES IN MEDICAL PRACTICE—edited by C. Allan Birch, M.D., F.R.C.P., Physician, Chase Farm Hospital, Enfield. SIXTH EDITION. Published by E. & S. Livingstone Ltd., Edinburgh and London, 1960. Distributed in the United States by The Williams & Wilkins Company, Baltimore 2, Maryland. 751 pages, 139 illustrations, $8.50.

ENZYMES IN HEALTH AND DISEASE—edited by David M. Greenberg, Ph.D., Professor of Biochemistry and Chairman of the Department, University of California School of Medicine, San Francisco, and Harold A. Harper, Ph.D., Professor of Biochemistry, University of California School of Medicine, San Francisco. With 26 Contributors. Charles C. Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois, 1960. 459 pages, $14.50.

EXTREMITIES, THE—2nd Edition—Daniel P. Quiring, Ph.D., Late Head of the Anatomy Division Cleveland Clinic Foundation and Associate Professor of Biology Western Reserve University. Revised and Edited by John H. Warfel, Ph.D., Assistant Professor of Anatomy, The University of Buffalo, School of Medicine, Buffalo, New York. Lea & Febiger, Washington Square, Philadelphia 6, Pa., 1960. 120 pages, 106 engravings, $3.25.

FUNDAMENTALS OF CHILD PSYCHIATRY—Stuart M. Finch, M.D., Associate Professor of Psychiatry and Director of the Children's Psychiatric Hospital, University of Michigan School of Medicine. W. W. Norton & Company, Inc., 101 Poplar Street, Scranton 9, Pa., 1960. 334 pages, $5.95.

HANDBOOK FOR NEUROTICS, A—Alf T. Haerem, M.D., Pacific Coast Publishers, 1023 Chestnut Street, Redwood City, California, 1960. 137 pages, $4.00.

HANDBOOK OF AGING AND THE INDIVIDUAL—Psychological and Biological Aspects—edited by James E. Birren. The University of Chicago Press, 5750 Ellis Avenue, Chicago 37, Illinois, 1959. 939 pages, $12.50.

HANDBOOK OF NEUROLOGICAL DIAGNOSTIC METHODS—edited by Fletcher McDowell, M.D., Assistant Professor of Medicine (Neurology), Cornell University Medical College; and Harold G. Wolff, M.D., Anne Parrish Titzell Professor of Medicine (Neurology), Cornell University Medical College. The Williams & Wilkins Company, Baltimore 2, Maryland, 1960. 201 pages, $4.50.

HEALTH PLANS AND COLLECTIVE BARGAINING—A Publication of the Institute of Industrial Relations, University of California—Joseph W. Garbarino. University of California Press, Berkeley 4, Calif., 1960. 301 pages, $5.00.

HERITABLE DISORDERS OF CONNECTIVE TISSUE—Illustrated Second Edition—Victor A. McKusick, M.D., Associate Professor of Medicine, Johns Hopkins University School of Medicine; Physician, Johns Hopkins Hospital; Assistant Professor of Epidemiology, Johns Hopkins University School of Hygiene and Public Health, Baltimore. The C. V. Mosby Company, 3207 Washington Blvd., St. Louis 3, Mo., 1960. 333 pages, $12.00.

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Polyunsaturated Fatty Acids Can Reduce Cholesterol

The substitution of fats or oils containing polyunsaturated fatty acids for saturated fats or oils is the best way to reduce cholesterol in the blood system on the basis of present information, a New York University physician said recently.

Dr. Herbert Pollack, assistant professor of clinical medicine, Postgraduate Medical School, discussed cholesterol in a signed editorial directed to fellow physicians in a recent issue of the *Journal of the American Medical Association.*

Cholesterol has been incriminated as a factor in hardening of the arteries and heart trouble.

(The terms saturated, polyunsaturated, and monounsaturated are used to describe the chemical structure of fats and oils. A saturated fat is one containing all the hydrogen atoms it can hold. A polyunsaturated fat is so named because it has more than one unsaturated bond in its chemical makeup. A monounsaturated fat has only one unsaturated bond in its chemical linkage.)

"It is accepted generally that specific alteration in the diet will decrease the concentration of cholesterol in the blood," Dr. Pollack said. "The most effective results to date have been achieved by increasing consumption of polyunsaturated fatty acids, particularly linoleic acid."

At one time, he said, a "low fat, low cholesterol" type of diet was sometimes advocated as a means of lowering the cholesterol level. But he said it is now generally believed that dietary cholesterol, within the limits of the average mixed diet, plays little part in raising the cholesterol concentration in the blood.

Dr. Pollack said confusion has been created because "some of the largest vegetable oil processors in the United States have implied in advertisements that the cholesterol level can be lowered by adding polyunsaturated fatty acids to the diet."

However, he said, a person would benefit little by consuming more polyunsaturated fatty acids if he did not at the same time reduce his intake of other fats. In other words, he said, the polyunsaturated fatty acids "must replace, rather than supplement some of the saturated fats and oils already in the diet."

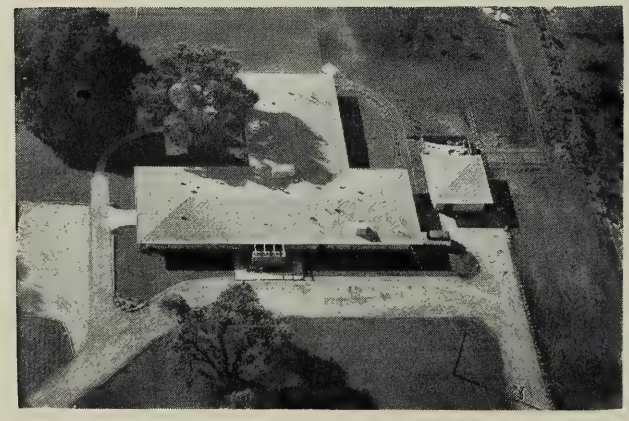
Claims for various hydrogenated vegetable oils must be assessed with the knowledge that a product loses most or all of its polyunsaturated qualities when it is hydrogenated, Dr. Pollack said. Products are hydrogenated so they can be stored for longer periods without spoiling.

"Some manufacturers cite the 'iodine number' of a fat or oil as evidence of the unsaturated fatty acid content of their product," he continued.

"This number is not a reliable indicator of therapeutic value because it measures monounsaturated and polyunsaturated fatty-acid content at the same

(Continued on Page 88)

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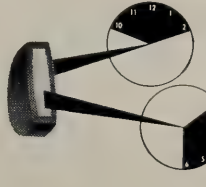
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References: 1. Fabricant, N. D.: E. E. N. T. Monthly **37**:460 (July) 1958. 2. Lhotka, F. M.: Illinois M. J. **112**:259 (Dec.) 1957. 3. Farmer, D. F.: Clin. Med. **5**:1183 (Sept.) 1958. 4. Fuchs, M.; Bodi, T.; Mallen, S. R.; Hernando, L., and Moyer, J. H.: Antibiotic Med. & Clin. Ther. **7**:37 (Jan.) 1960. 5. Halpern, S. R., and Rabinowitz, H.: Ann. Allergy **18**:36 (Jan.) 1960.

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Polyunsaturated Fatty Acids Can Reduce Cholesterol

(Continued from Page 84)

time. A monounsaturated acid . . . does not affect the cholesterol concentration of the blood.

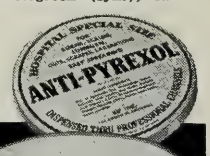
"Contrary to statements sometimes made, not all animal fats are low in the polyunsaturated fatty acid content nor are all vegetable oils high in this quality. The depot fat of chicken is an excellent source of linoleic acid.

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Physicians Mail Journals To Fight Cold War

Dr. Charles B. Daugherty of Jeannette, Pa., is doing his bit to fight the cold war.

Under his direction, American physicians have begun sending their old medical journals to physicians in foreign lands instead of letting them go to waste.

The semi-retired otolaryngologist feels this will help deter the spread of communism.

"Doctors in some of these situations are the only literate persons in their communities and have great influence," he said. "If we can get an individual doctor to say 'America is good,' the whole community will say 'America is good.' "

Physicians in many parts of the world lack current medical literature, and since English has largely replaced German as the medical language of the world, American physicians with their vast amount of such literature are in a position to make a contribution to foreign medicine for the cost of re-mailing old journals, according to an article in the Medicine at Work section of the February 27 *Journal of the American Medical Association.*

After nine months, 65 American physicians are mailing journals to 83 of their counterparts overseas. Dr. Daugherty has access to the addresses of 250,000 foreign physicians and hopes to expand the program, called "Colleagues Everywhere."

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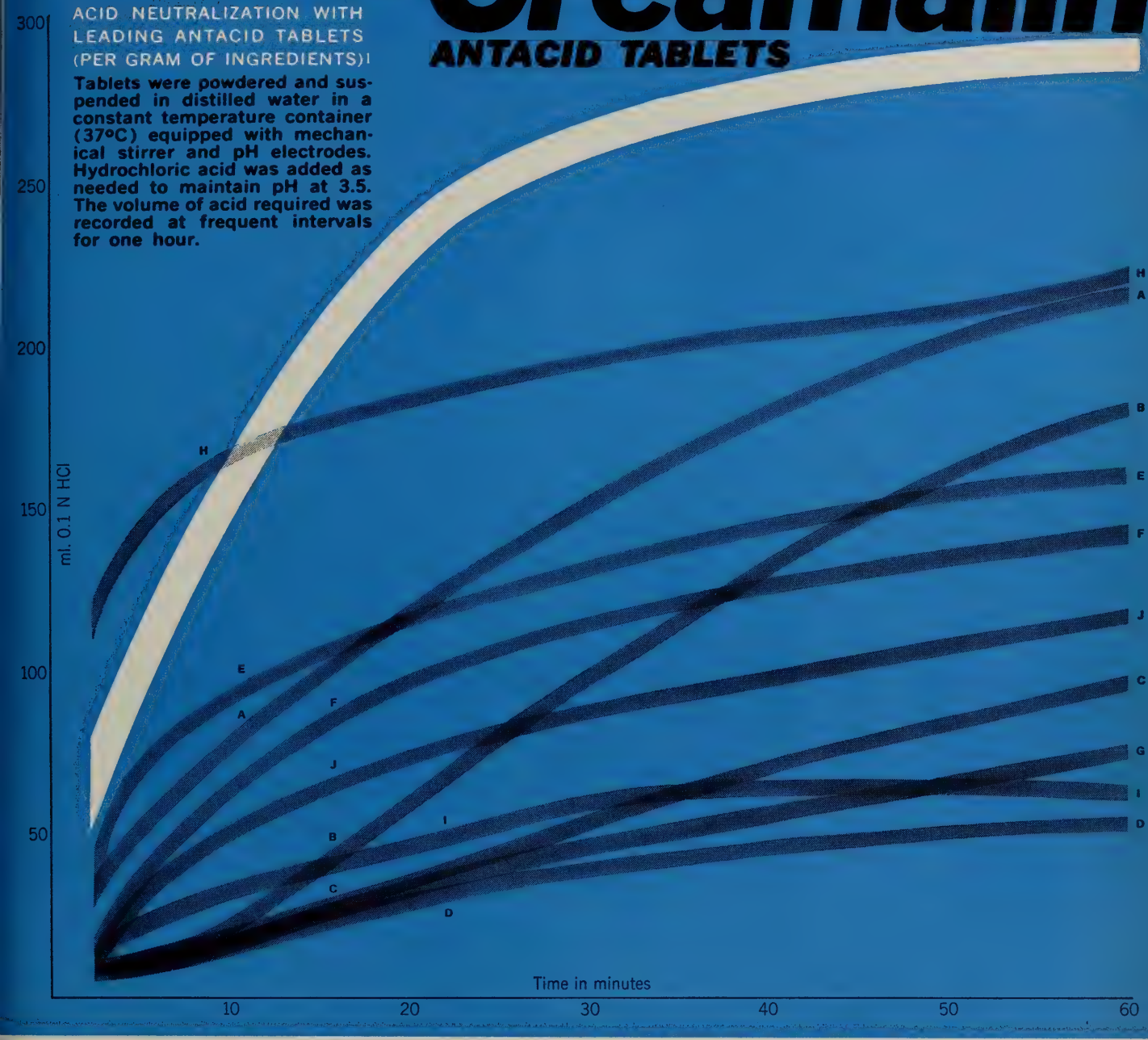
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1. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A. (Scient. Ed.)* 48:380, July, 1959. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A. (Scient. Ed.)* 48:384, July, 1959.

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Weed Killer Aminotriazole May Correct Thyroid Trouble

Aminotriazole, the weed killer that touched off the "cranberry crisis," may prove to be a remedy for an overactive thyroid gland, Dr. E. B. Astwood, Boston, said recently.

Dr. Astwood, professor of medicine, Tufts Medical School, in a letter published in a recent issue of the *Journal of the American Medical Association*, said:

"Before the cranberry episode my associates and I had been looking for an antithyroid compound that might have a longer duration of action than those currently in use for the treatment of hyperthyroidism and . . . aminotriazole might be such a compound."

It was the discovery of traces of the weed killer in certain cranberry crops that prompted the government to issue a warning to consumers last November.

"Several antithyroid drugs . . . have been widely used in the treatment of hyperthyroidism in the past 17 years, and no instance of the induction of carcinoma has been encountered," Dr. Astwood wrote. "The doses used for this purpose were much larger than the quantity of aminotriazole that would de-

(Continued on Page 99)

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Drug for Diabetics Aids Victims of Parkinson's Disease

Tolbutamide, a drug customarily prescribed only for diabetics, has been used with surprisingly good results in the treatment of Parkinson's disease by two physicians.

Writing in the March 26 *Journal of the American Medical Association,* Drs. Edwin W. Gates, Niagara Falls, N. Y., and Irving Hyman, Buffalo, N. Y., told how the drug had helped 15 persons with Parkinson's disease.

The disease attacks the nervous system causing a stooped posture, stiffness and slowness of movement, rigidity of facial expression, and a tremor of the limbs.

"In some patients there was a decrease in tremor, and in others the most marked effect was the lessening of the rigidity," they said. "Most of the patients given tolbutamide were benefited to the extent that they required less care and could perform many more daily living tasks."

The two physicians began using the drug to treat patients with Parkinson's disease after one of them noted a marked decrease in the tremor of the hands and fingers of a 57-year-old diabetic given tolbutamide in 1958.

There is no known cure for Parkinson's disease. Antispasmodic drugs are the usual treatment to alleviate the symptoms. Tolbutamide is a synthetic hypoglycemic agent which lowers the blood sugar level.

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BOOKS RECEIVED

Books received by CALIFORNIA MEDICINE *are acknowledged in this column. Selections will be made for more extensive review in the interests of readers as space permits.*

HOPE DEFERRED—Jeanette Seletz. Vantage Press, 120 W. 31st Street, New York 1, N. Y., 1960. 546 pages, $4.50.

LIFESPAN OF ANIMALS, THE—Ciba Foundation Colloquia on Ageing, Volume 5. Editors for the Ciba Foundation, G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Maeve O'Connor, B.A., Little, Brown and Company, Boston, Massachusetts, 1959. 324 pages, with a Cumulative Index of 46 pages—Indexes to Volumes 1-5, $9.50.

LEUKOCYTE ANTIGENS AND ANTIBODIES—Roy L. Walford, M.D., Assistant Professor of Pathology, University of California School of Medicine, Los Angeles; Assistant Director of Clinical Laboratories in charge of Blood Bank and Hematology, University of California Hospital, Los Angeles. Grune & Stratton, Inc., 381 Fourth Avenue, New York 16, N. Y., 1960. 182 pages, $6.75.

MASSAGE, MANIPULATION AND TRACTION—edited by Sidney Licht, M.D., Honorary Member, British Association of Physical Medicine, Danish Society of Physical Medicine, and the French National Society of Physical Medicine. Elizabeth Licht, Publisher, 360 Fountain Street, New Haven, Conn., 1960. 275 pages, $10.00.

MEDICAL CARE OF THE ADOLESCENT—A Textbook Concerning the Medical Care and Understanding of Adolescents Themselves and of Their Disorders—by J. Roswell Gallagher, M.D., Chief of the Adolescent Unit, The Children's Hospital Medical Center, Boston, and Lecturer on Pediatrics, Harvard Medical School; and the Staff Physicians of the Adolescent Unit. Appleton-Century-Crofts, Inc., 35 West 32nd Street, New York 1, N. Y., 1960. 369 pages, $10.00.

MODERN NUTRITION IN HEALTH AND DISEASE—Dietotherapy—Second Edition—edited by Michael G. Wohl, M.D., Chief of Human Nutrition, Division of Biological Chemistry, Hahnemann Medical College and Hospital; and Chief of Nutrition Clinic, Philadelphia General Hospital; and Robert S. Goodhart, M.D., Scientific Director, The National Vitamin Foundation, Inc.; Physician-in-Charge, Washington Heights Nutrition Clinic, New York City Department of Health. Lea & Febiger, Washington Square, Philadelphia 6, Pennsylvania, 1960. 1152 pages, $18.50.

NEW AND NON-OFFICIAL REMEDIES—1960—Evaluated by A.M.A. Council on Drugs. J. B. Lippincott Company, East Washington Square, Philadelphia 5. 768 pages, $3.35.

OLDER PATIENT, THE—by Twenty-One Authors—edited by Wingate M. Johnson, M.D., Chief of Staff, Private Diagnostic Clinic, and Professor Emeritus of Clinical Medicine, Bowman Gray School of Medicine of Wake Forest College. Paul B. Hoeber, Inc., Medical Division of Harper & Brothers, 49 East 33rd Street, New York 16, N. Y., 1960. 589 pages, $14.50.

PHARMACOLOGY AND THERAPEUTICS—A Textbook for Students and Practitioners of Medicine and its Allied Professions—Fourth Edition, Revised and Enlarged—Arthur Grollman, Ph.D., M.D., F.A.C.P., Lecturer in Pharmacology and Toxicology, The Medical Branch, and Professor and Chairman of the Dept. of Experimental Medicine, The Southwestern Medical School, The University of Texas. Lea & Febiger, Washington Square, Philadelphia 6, Pa., 1960. 1079 pages, 217 illustrations with 2 in color, $12.50.

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PLACENTA AND FETAL MEMBRANES, THE—edited by Claude A. Villee. The Williams & Wilkins Company, Baltimore 2, Md., 1960. 404 pages, $10.00.

PSYCHIATRY: DESCRIPTIVE AND DYNAMIC—Jackson A. Smith, M.D., F.A.C.P., Clinical Director, Illinois State Psychiatric Institute, Chicago, Illinois. The Williams & Wilkins Company, Baltimore 2, Md., 1960. 342 pages, $7.00.

RELUCTANT SURGEON, THE—A Biography of John Hunter—John Kobler. Doubleday & Company, Inc., 575 Madison Avenue, New York 22, New York, 1960. 359 pages, $4.95.

SELECTED DISEASES—A Bibliography of Internal Medicine—Arthur L. Bloomfield, M.D., Professor of Medicine, Emeritus, Stanford University School of Medicine. The University of Chicago Press, 5750 Ellis Avenue, Chicago 57, Illinois, 1960. 312 pages, $6.00.

SIGNIFICANT TRENDS IN MEDICAL RESEARCH—Ciba Foundation, Tenth Anniversary Symposium. Editors for the Ciba Foundation, G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P.; Cecilia M. O'Connor, B.Sc., and Maeve O'Connor, B.A. Little, Brown and Company, Boston, Massachusetts, 1959. 356 pages, with 41 illustrations, $9.50.

SURGERY IN WORLD WAR II—NEUROSURGERY, VOLUME II—Prepared and published under the direction of Major General S. B. Hays, The Surgeon General, United States Army. Editor in Chief, Colonel John Boyd Coates, Jr., MC; Editors for Neurosurgery, R. Glen Spurling, M.D., and Barnes Woodhall, M.D.; Associate Editor, Elizabeth M. McFetridge, M.A., Office of the Surgeon General, Dept. of the Army, Washington, D. C., 1959. 705 pages. This volume may be purchased from the Superintendent of Documents, Washington 25, D. C., for $7.00 per copy.

TEEN-AGE YEARS, THE—A Medical Guide for Young People and Their Parents—Arthur Roth, M.D. Doubleday & Company, Inc., 575 Madison Avenue, New York 22, N. Y., 1960. 288 pages, $3.95.

TRAVELER'S GUIDE TO GOOD HEALTH, A—by Colter Rule, M.D. Doubleday & Company, Inc., 575 Madison Avenue, New York 22, New York, 1960. 266 pages, $3.95.

YEAR BOOK OF DRUG THERAPY, THE—(1959-1960 Year Book Series)—edited by Harry Beckman, M.D., Director, Departments of Pharmacology, Marquette University Schools of Medicine and Dentistry; Consulting Physician, Milwaukee County General and Columbia Hospitals, Milwaukee, Wisconsin. The Year Book Publishers, Inc., 200 E. Illinois St., Chicago 11, 1960. 570 pages, $8.50.

YOUR HEART: A HANDBOOK FOR LAYMEN—H. M. Marvin, M.D., Associate Clinical Professor of Medicine, Yale University School of Medicine, Past President, American Heart Association, Former Member National Advisory Heart Council (U. S. Public Health Service). Doubleday & Company, Inc., 575 Madison Avenue, New York 22, New York, 1960. 335 pages, $4.50.

Weed Killer Aminotriazole May Correct Thyroid Trouble

(Continued from Page 94)

rive from the most highly contaminated cranberries.

"It is misleading to refer to an antithyroid compound such as aminotriazole as a carcinogen because this term brings to mind locally acting chronic irritants . . ."

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C.M.A.'s Physician Placement Service would like to be of assistance to its members who are in need of associates, assistants or partners. "Locum Tenens" and practices for sale are also handled on a no fee basis. For a description of procedure and a questionnaire, mail a card or letter to California Medical Association, Placement Service, 693 Sutter Street, San Francisco 2, Calif.









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Handy Cards Tell What to Do In Case of Poisoning

Handy reference cards telling what to do in case of accidental poisoning and how to prevent such emergencies have been made available by the American Medical Association.

The cards reflect a growing awareness of the magnitude of the problem, according to Bernard E. Conley, Ph.D., secretary of the American Medical Association Committee on Toxicology.

Statistics show that 1,422 persons, 355 of them pre-school children, were killed in one year by packaged chemicals, such as detergents, cleansers, and other household cleaning agents, while thousands were injured.

"The first aid for poisoning chart serves as both a reminder of the dangers of accessible poisons to small children and as a help in meeting poisoning emergencies," Dr. Conley said.

As another means of preventing poisonings, the American Medical Association is supporting a bill, now before Congress, that would require household, commercial, and industrial products to carry labels listing their contents.

The cards, suitable for attaching to medicine cabinets, may be obtained free of charge from the Committee on Toxicology, American Medical Association, 535 N. Dearborn St., Chicago 10, Illinois.

Hypnosis Used in Facial Skin Planing

Hypnosis can alleviate much of the unpleasantness of facial skin planing, according to Dr. James W. Burks, New Orleans.

Dr. Burks reported on the use of hypnosis as an anesthetic during the operation known as dermabrasion in the March *Archives of Dermatology*, published by the American Medical Association.

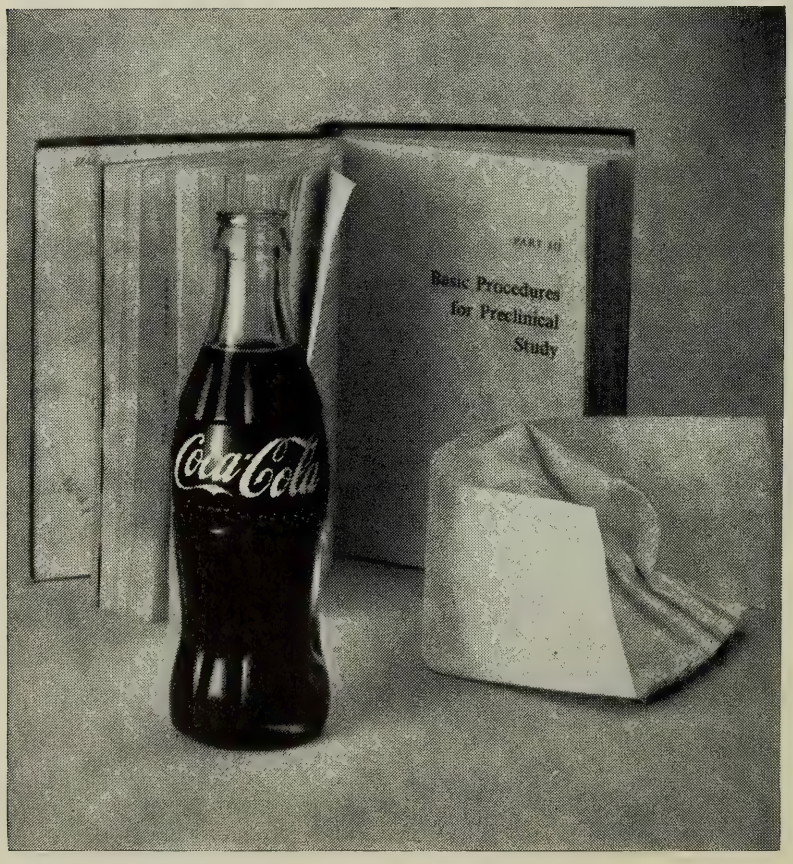
"In general, the state of hypnosis sought and attained was one of a mild to medium hypnotic stage," he said.

"Success here was recognized by a relative lack of visible signs of apprehension . . . and postoperative shock reactions, such as nausea, vomiting, and syncope [fainting]."

Patients who had undergone the operation before thought the discomforts were lessened by hypnosis, he said. All said the operation seemed to take 15 to 25 minutes less than it actually did, he added.

The operation consists of freezing the skin and removing the outer layer in order to improve the appearance, for example, removing scars caused by acne.

Dr. Burks is associated with the division of dermatology, department of medicine, Tulane University School of Medicine and Charity Hospital of Louisiana, New Orleans.



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References: 1. Kanof, N. B., and Blau, S.: *New York J. Med.* 59:2184 (June 1) 1959.
2. Smith, J. G., Jr.; Zawisza, R. J., and Blank, H.: *A.M.A. Arch. Dermat.* 78:643 (Nov.) 1958.

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*TRADEMARK

Antimalarial Drug Used to Treat Circulatory Ails

An antimalarial drug has been used with some success in treating patients with heart and circulatory diseases, a Cleveland physician reported in a recent issue of the *Journal of the American Medical Association.*

Dr. Benjamin P. Madow of the department of medicine, Mount Sinai Hospital, Cleveland, said he prescribed the drug because of its proven ability to "desludge" the blood of malaria victims.

"Sludging" occurs when normal components of the blood, the red blood cells, begin to stick together in groups and hinder circulation by plugging small veins and artery branches. The process often is a complicating factor in heart attacks, angina, and cerebrovascular accidents.

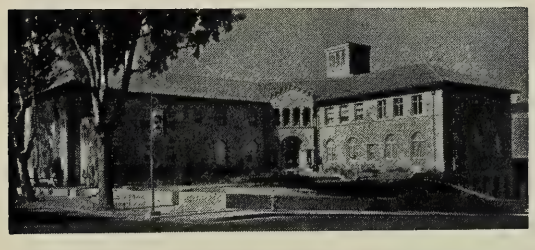
Dr. Madow described the results obtained in treating 44 patients suffering various vascular diseases accompanied by sludging with the antimalarial drug hydroxychloroquine (Plaquenil) sulfate.

He said the drug increased blood flow, reduced the number of blocked vessels, and reduced the size of the clumps of red blood cells.

He said it was significant that 11 of the 16 patients suffering angina gained some relief from the pain associated with the disease during nine months they were maintained on the drug. All had been treated previously and unsuccessfully with the customary drugs, he said.

Twenty-two patients who had suffered heart attacks previously had no recurrences during nine months' treatment with the antimalarial drug, he said, but this could not be considered significant until a longer period has elapsed.

Dr. Madow said his preliminary findings indicate that desludging agents should be more extensively studied for their role in the treatment of vascular disease.



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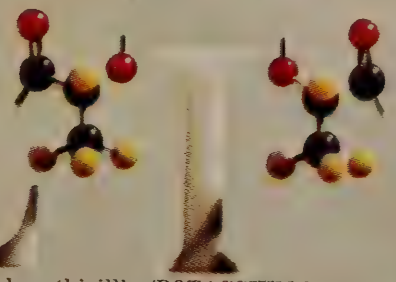
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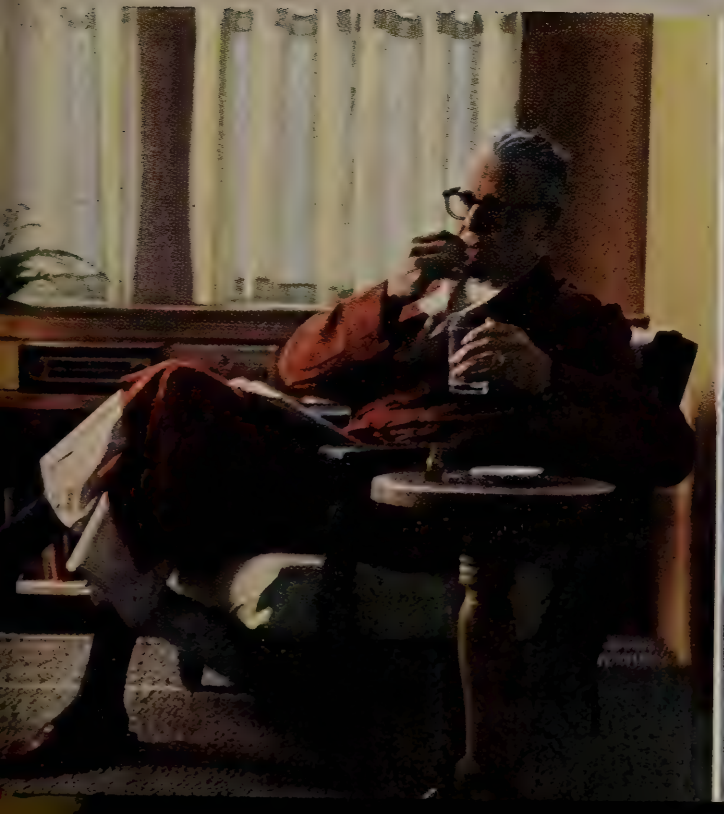
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LSD Helps Hopeless Mental Patients

LSD-25, a drug capable of bringing back childhood memories with the sharpness of a 3-D movie, is helping fight mental illness in persons formerly considered hopeless, two psychiatrists said recently.

Drs. Arthur L. Chandler and Mortimer A. Hartman of the Psychiatric Institute of Beverly Hills, California, reported on the use of the drug (Lysergic Acid Diethylamide) in 110 patients in the March *Archives of General Psychiatry*, published by the American Medical Association.

"With LSD as an aid, it has been possible to 'reach' and work with patients who are otherwise unresponsive to psychotherapy," they said.

". . . there were a number of cases in which previous therapy, sometimes with several different therapists, had produced little or no improvement but in which introduction of LSD-25 effected a real breakthrough, followed by continued therapeutic improvement.

"In the study are several patients who had had as much as six years of previous analytic therapy, with small benefit, and who, after 20 to 40 LSD sessions, either were discharged as markedly improved or appeared to be well on their way to the resolution of their basic problems."

They also said "because initial therapeutic gains can occur in a dramatic manner and, after a shorter period than is the case with psychotherapy in general, some patients have sought treatment and benefited who would never have accepted the long-term schedule required in psychoanalytic or most other forms of psychotherapy."

The 110 patients studied included psychoneurotics and those with personality disorders, trait disturbances, and other problems, such as addiction to alcohol and/or narcotics. There were 62 men and 48 women ranging in age from 15 to 62.

A total of 88 showed improvement ranging from "slight" to "outstanding" after an average of six sessions with LSD. The group that showed the most

(Continued on Page 32)

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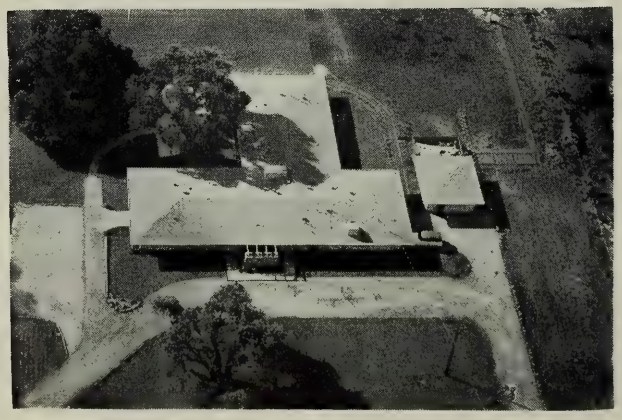
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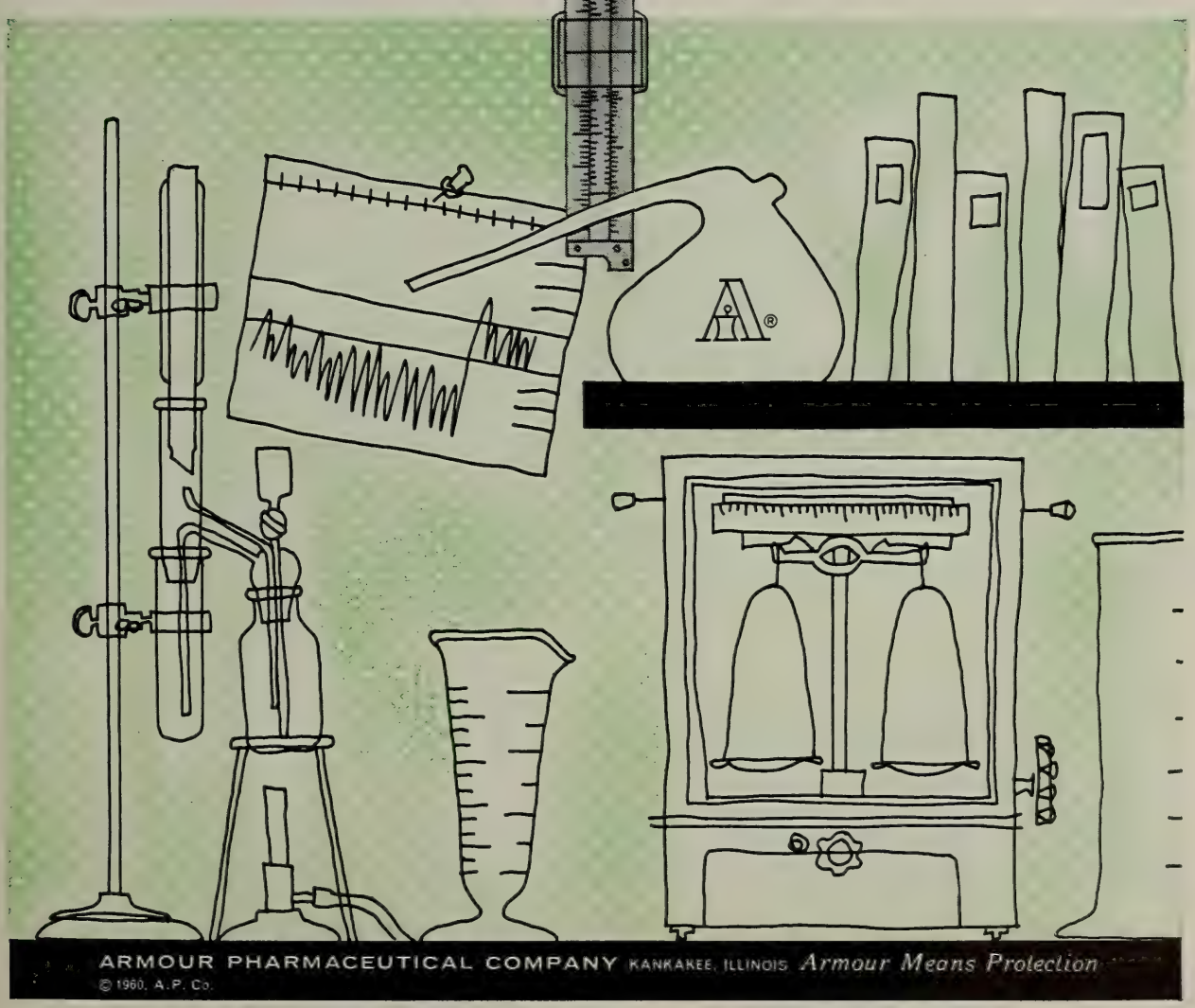
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LSD Helps Hopeless Mental Patients

(Continued from Page 22)

progress were the manic-depressives, those who are alternately highly elated and deeply depressed.

"An encouraging result is the promising progress of those with addictions. Most of these patients were alcoholic problems, but seven of these also had a recent history of drug addiction. The fact that this group did as well as it did suggests the possibility that LSD-25 may be a valuable therapeutic aid in work with this most difficult group."

Drs. Chandler and Hartman said the drug produces visual illusions, but these could not be properly defined as hallucinations.

"The most obvious difference between the imagery and fantasy which occurs with LSD-25 and hallucination is the factor of insight," they said. "Under LSD-25 the patients know that they are merely experiencing a 'waking dream' or remembering some experience from the past. They do not believe that it is actually happening."

The psychiatrists also described how the drug unlocks memories stored in the unconscious.

"It is very common for early childhood memories that have been repressed or forgotten to emerge, usually with great clarity of recall," they said.

"Scenes may be pictured with great vividness of color and other detail, and the patient feels himself to be back in the situation and experiences the affects in all the original intensity. Some patients describe it by saying that it is as though a 3-D film tape were being run off. . . .

"Several patients have checked with parents concerning incidents or certain details, such as household furnishing, with striking confirmation, especially when it is considered that some of the memories dated back as early as the first year of life."

The drug's ability to bring back early memories in nearly all patients proved in some to be of "tremendous therapeutic benefit," they concluded.

Ultraviolet Radiation Cuts Operating Room Infections

Ultraviolet radiation was recommended recently as an effective means of preventing infection from antibiotic-resistant bacteria in operating rooms.

A method that has kept operating room infections to a bare minimum at Duke Hospital in Durham, N. C., was described by Dr. Deryl Hart in a recent *Journal of the American Medical Association.*

"It has always been our opinion that keeping pathogenic bacteria out of a clean wound is prefer-

(Continued on Page 40)

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Social Effects of Pep Pills Can Be Good and Bad

Amphetamine, a commonly used stimulant, can have both a good and a bad effect on an individual's social behavior, a study indicated recently.

The conclusion was based on a study involving athletes given the so-called "pep pills" and asked to describe how they felt before and after by filling out an 81-item check list.

Writing in the *Journal of the American Medical Association,* Gene M. Smith, Ph.D., and Henry K. Beecher, M.D., of the Harvard Medical School, said there has been considerable interest in the question of whether amphetamine produces temporary alterations in personality which might facilitate antisocial behavior.

The authors referred to reports that lawbreakers take "thrill pills" to bolster their courage to commit crimes and pointed out that the same type of pills are believed to be in widespread use by students, businessmen, and other noncriminal citizens.

"In the present investigation," they said, "increased feelings of mental and physical activation, elation, boldness, and friendliness were the main effects of amphetamine on mood and physical states.

"The increase in effects classified as boldness and friendliness is pertinent to the issue of antisocial behavior; perhaps the increased checking of drunk and impulsive is also, since increases in these two effects may imply a reduction in self-control."

The athletes checked the "bold, boastful, cocky, self-confident, playful, and domineering" categories more and the "insecure" category less when under the influence of amphetamine, the researchers said.

"Those mood changes might, under certain circumstances, facilitate antisocial behavior," they said.

"However, the increased boldness was accompanied by greater friendliness, as indicated by more checking of friendly, talkative, good-natured, obliging and trustful, and less checking of grouchy, unsocial, and sarcastic."

The consequences of simultaneously increasing friendliness and boldness are not known, they said. Furthermore, they said, it is almost certain that such behavior consequences would be strongly influenced by social and environmental circumstances.

"The data of the present investigation indicate that most non-delinquent persons who take amphetamine in a moderate dose, such as that used in the present study, and who do so in a situation in which social forces tend to inhibit rather than promote antisocial behavior, are likely to experience mood effects which contain both socially positive and socially negative elements," they concluded.

An earlier report by the same authors showed that average doses of amphetamine improved athletes' performance.

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1. Rein, C. R., and Fleischmajer, R.: The efficacy of tetracycline phosphate complex (TETREX) in dermatological therapy. Antibiotic Med. & Clin. Ther. 4:422 (July) 1957.

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Ultraviolet Radiation Cuts Operating Room Infections

(Continued from Page 32)

able to trying to control their growth or to kill them after they enter . . .," Dr. Hart wrote.

"With the present widespread distribution of antibiotic-resistant staphylococci, prevention of such contamination is now all the more important."

"No area of the body is inaccessible today to the trained surgeon," according to an accompanying *Journal* editorial. "However, with these larger, more traumatizing, and longer procedures, 'unexplained infections' have become progressively more common and more critical."

Ultraviolet radiation, which kills bacteria in the air, has been in use at Duke Hospital for more than 20 years in as many as 15 operating rooms.

Dr. Hart said the results obtained "have been nothing short of miraculous.

"In the Duke Hospital so-called unexplained infections in clean operative wounds not only have been explained but have been eliminated, to a great extent, by a variety of measures aimed at limiting the contamination of the air with pathogenic bacteria, and by the use of ultraviolet radiation to kill the remaining bacteria that inevitably get into the air and, by sedimentation, onto exposed surfaces.

"We consider the air route of spread to be the greatest factor . . . and therefore to be responsible for most of the so-called unexplained infections in clean operative wounds today."

Dr. Hart said destroying bacteria floating in the air obviously offers protection regardless of the source of the bacteria, i.e., whether it originates in the respiratory tract of operating room personnel, contamination of the room, clothing or blankets, or air from other parts of the hospital.

It was found that air contamination rose rapidly in a bacteria-free operating room when it was occupied. Studies showed that staphylococci were the main contaminants and were directly related to the number of persons in the room, how long they remained, and the time of the year, the worst season being winter.

Dr. Hart said it also was found that the average mask, even when two are worn, is inadequate to control air contamination, and sterilization of the air within the air ducts does not reduce the bacteria content of the air to a safe level.

Protection from the ultraviolet rays can be afforded patient and personnel, he pointed out.

The eyes of the personnel are guarded from direct radiation by an eye shade and from reflected radiation by glasses. The eyes of the patient are closed. For frequent and long periods of exposure, he said, the skin is covered or shaded.

On the basis of Duke Hospital's long experience, Dr. Hart recommended that "ultraviolet radiation be used continuously as an addition to aseptic operating room technique."

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Midget Baseball Presents Health Hazards

Little league baseball presents a situation that can prove harmful to the health of participating youngsters, say two physicians in a recent *Today's Health* magazine.

Drs. Thomas E. Shaffer, Columbus, Ohio, and John L. Reichert, Chicago, said there were many undesirable features in organized midget baseball, but neither disagreed with the underlying theory that the leagues can promote healthy competition.

"No informed person will deny that competition is an essential part of every child's education and growth," Dr. Reichert said in the American Medical Association magazine.

"But it is equally true that competitive drives must be allowed to develop normally and not be overstimulated or suppressed, so that as the child matures, competition and cooperation are balanced forces in his personality," he said. "A child can best be developed in respect to posture, coordination, strength and control, and emotional balance by a process of gradual training during the years of physiological immaturity, not by the forced development of special athletic skills."

With regard to injuries, Dr. Reichert said, "Pre-

(Continued on Page 46)

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Midget Baseball Presents Health Hazards

(Continued from Page 44)

adolescent and adolescent children are in a vulnerable age.

"During this age there are periods of rapid growth with temporary maladjustments and weaknesses. During these periods, the child is particularly susceptible to dislocations of joints and to bone injuries."

Dr. Shaffer said athletic competition for children is undesirable when organized along adult patterns. In such cases, he said, the unavoidable emphasis placed on winning puts too many pressures on children.

". . . competitive physical activities for this age group are desirable provided they are conducted with due regard for developmental characteristics such as short attention span, variations in physical skills, and a natural tendency to disregard need for rest and relaxation," he said.

"Most of the undesirable features of the little leagues could be eliminated by discontinuing sponsorship of teams by business organizations, by eliminating tournaments except on a community-wide championship schedule, by requiring medical examination at the start of a season and during the season if accident or illness occurred, and by requiring trained, experienced individuals in positions of leadership."

Blood Pressure Machines Termed Useless for Laymen

Machines purporting to measure blood pressure that are placed in grocery stores for the use of shoppers today were termed useless.

"We know nothing about the reliability of such a machine, but would doubt its usefulness," Dr. William W. Bolton wrote in the current May *Today's Health,* published by the American Medical Association.

"Blood pressure changes many times a day, and an isolated reading is therefore not of much real value," he said.

"It would, of course, be useless to you unless you checked it with your physician. And it might even be misleading, depending on what range of pressure happened to be shown at the time you used the machine.

"Blood pressure in itself is informative to the physician only in relation to other findings in his examination of the patient."

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Volume 92 JUNE 1960 Number 6

Intestinal Adhesions

Present Status of Prevention and Treatment

JOHN E. CONNOLLY, M.D., and JOHN W. SMITH, M.D., Palo Alto

• **Although many treatments have been proposed for the prevention of intestinal adhesions, none has been completely effective. For bowel obstruction due to adhesions the initial approach should be conservative. If operation becomes necessary, the best results depend on avoidance of trauma and infection, division of adhesions with cautery, use of mesothelial grafts, instillation of intraperitoneal hyaluronidase and stimulation of early postoperative peristalsis. In the event of massive adhesions or failure of other treatment, intestinal plication is the treatment of choice.**

ONE OF THE MOST perplexing complications following abdominal operations is bowel obstruction secondary to intestinal adhesions. Intestinal adhesions rarely occur without a history of an abdominal operation and commonly the intervention was either appendectomy or a gynecological procedure. The obstruction is almost always of the small intestine and in about one-fourth of patients strangulation occurs.

The initial operative treatment is usually lysis by sharp dissection of the obstructing adhesions. However, many patients treated in this way return with repeated episodes of bowel obstruction and may undergo laparotomy a dozen or more times for lysis of recurrent adhesions. Many surgeons believe there is no adequate solution to the problem of adhesions and obstruction.

It is well known that the severity of adhesions is related in part to mechanical trauma and sepsis, and therefore attempts to control these etiological factors have merit. Trauma to peritoneal surfaces causes inflammation and exudate which, in turn, lead to adhesions. The common mechanical insults at the time of operation are rough handling of tissues, improper use of retractors, excessive packing with gauze, use of dry gauze, unnecessary sponging, contamination with glove powder, mass ligatures and the use of unnecessarily large needles, sutures and hemostats. Other common sources of peritoneal injury are bacterial, chemical and thermal trauma.

Although it was previously believed that all denuded areas of peritoneum should be closed by oversewing, several recent investigators have questioned this. Robbins, Brunschwig and Foote[22] noted that although it was often impossible to cover large peritoneal defects in patients undergoing extensive exenteration procedures for malignant disease, postoperative obstruction from adhesions rarely occurred. These investigators and others[26,28] reaffirmed in experiments on animals that any form of reperitonealization increases the incidence of adhesions.

After experimental observation that there was less

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recurrence after adhesions were freed by cautery, several investigators[21,29] have recommended this method of lysis. The reason for the better result, they explained, was that division by coagulation left dead tissue on exposed surfaces and healing occurred beneath before separation of the eschar.

Many ways to prevent recurrent adhesions have been proposed, among them the interposition of foil or membranes to keep adjacent areas of bowel from touching, feeding an iron suspension by mouth and then moving a magnet over the abdomen postoperatively, introduction of various solutions, such as saline and glucose solutions and amniotic fluid, and use of the enzymes papain and trypsin. None of them has stood the test of time.[3]

During the past two decades a number of other agents have been recommended as effective in preventing recurrent adhesions. In the early 1940's the sulfonamides were thought to hold promise for this purpose. It was hoped that their power to combat infection would preclude adhesion formation. However, both experimental and clinical studies showed that in powdered form the sulfonamides cause adhesions and are thus more harmful than beneficial.[9]

Prevention of coagulation of the exudate at the site of peritoneal injury may prevent the formation of adhesions, since fibrin provides the framework for the migration of capillaries and fibroblasts. The only anticoagulant which has been effective in preventing adhesions is heparin.[12] The recommended dose of 40,000 units was given intraperitoneally over a period of three days, starting at the time of operation. Twenty-one cases in which heparin was used have been reported.[12,13,14] In three of them the patients died of hemorrhage, while in two recurrent obstruction developed. No clinical reports on the use of heparin against adhesions have appeared in the last ten years.

Omental grafts were suggested many years ago as a means of covering traumatized bowel to prevent adhesions, but use of them was abandoned. The method has been revived with some success.[15,30] and more recently the use of only the mesothelium as a graft has been reported.[4] The graft may be taken from mesentery, omentum, falciform ligament or parietal peritoneum. There is both experimental and clinical evidence that this is a useful method of covering small areas of injured bowel and preventing recurrent adhesions.

In an effort to prevent prolonged contact of peritoneal surfaces, some investigators gave 0.25 mg. of prostigmine every four hours for 48 hours, after lysis was carried out, to stimulate early peristalsis.[5,23] Experimental studies showed that in animals so treated the recurrences were fewer and less dense than in animals treated with atropine rather than prostigmine. No reports of use of this method in humans have appeared but experimental results are promising enough to recommend clinical trial.

The use of plasmin and streptokinase-streptodornase to prevent adhesions has also been investigated in the laboratory.[11,25] The rationale is that these agents act as fibrinolysins which interrupt the mechanism of formation of adhesions by removing fibrin. Since the evidence in support of these agents is contradictory and no clinical studies have been reported, further animal investigation is in order before clinical application can be recommended.

Hyaluronidase has been studied as a preventive agent against adhesions. It has been postulated that it promotes absorption of fibrin and other elements of exudate, although other observers[27] have expressed belief that it acts by suppression of fibroblasts. While experimental studies have shown that it does not completely prevent adhesions,[6,7] results have indicated that its use leads to a decrease in the number and density of adhesions. Of twenty-six patients in whom hyaluronidase was used, only two had subsequent obstruction in a ten-year follow-up.[16] The drug was employed intraperitoneally, after lysis of adhesions, in a dose of 37,500 units in 20 cc. of saline solution.

Corticotropin, cortisone and hydrocortisone have been studied with regard to effect on the formation of adhesions. The available experimental reports suggest that although these drugs are effective in delaying the formation of adhesions they do not prevent or modify the final extent of such lesions.[2] In limited clinical use, cortisone has been ineffective in preventing adhesions.[10]

Plication of the intestine is another approach to the problem of adhesions. Advocates of this procedure, believing that there is no satisfactory method of preventing adhesions, hold that control over the points at which adhesions occur is the only likely way to prevent recurrent obstruction. The method of intestinal plication, first described in 1937,[17] consists of folding the small bowel back and forth on itself and holding it in position by suture of the mesentery. This is carried out after all adhesions have been divided, whether they are obstructing or not. There have been enthusiastic reports concerning this operation,[19,20,24] and many patients who had had countless previous operations for adhesions remained free of obstruction thereafter. The overall reported rate of recurrent obstruction following plication is 12 per cent,[8] and most of the cases in which obstruction did recur were those in which the plicated bowel did not stay together, or where not enough small bowel was included in the plication. The best results were obtained when the entire small bowel was plicated. The technical details of the operation have been well described by Noble[18] and Barron and Fallis.[1]

CONCLUSIONS

The initial approach to bowel obstruction due to intestinal adhesions should be conservative. This consists of intubation, suction and supportive therapy. However, unless evidence of recovery is prompt and unequivocal, operative intervention is imperative.

At operation, careful cleansing of gloves, avoidance of trauma to peritoneal surfaces and absolute asepsis are necessary. The obstructing adhesions should be divided by coagulating cautery. Small peritoneal defects should be covered by grafts of mesothelium from omentum or mesentery. Large peritoneal defects should be let alone. Hyaluronidase solution should be instilled into the peritoneal cavity before closure. Except in the case of anastomosis, the bowel should be stimulated toward early peristalsis by drugs.

In the event the above regimen is not successful, or for the patient with massive adhesions, plication of the entire small bowel is the most effective therapy available.

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Basilar Artery Disease

Clinical Manifestations

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• **Patients with basilar artery disease show their first symptoms by characteristic ischemic attacks. If the attending physician correctly diagnoses the condition and initiates anticoagulant therapy before a catastrophic episode occurs, there is reason to believe that the disease may be arrested temporarily.**

IN RECENT YEARS basilar artery disease has received a great deal of attention from neurologists as well as other physicians who are interested in cerebral vascular conditions. The classical description of this syndrome was given by Kubik and Adams[1] in 1946. It has been further documented by reports from the Mayo Clinic[3,4] as well as from neurologists in several other centers in the United States.

The present report is of 35 cases of basilar artery syndrome in which the patients were observed by the authors or in which the clinical summaries and reported neuropathological observations were felt to be of sufficient interest to warrant including them.

The series included 22 males and 13 females ranging in age from 42 to 90 with an average of 62 years. Twenty-four of the patients had blood pressure higher than 145/90 mm. of mercury and 11 also showed evidence of having generalized arteriosclerosis, which may or may not be associated with the two previously mentioned disease entities.

Seventeen patients gave a clear history of ischemic attacks; and a history suggestive of ischemic attacks was obtained in other patients but it could not be clearly substantiated before a thrombotic episode and death.

The criteria for anticoagulant therapy are (1) a cooperative patient; (2) no medical disease that would contraindicate the use of anticoagulants; (3) a physician who is familiar with the management of patients receiving anticoagulants; and (4) blood pressure below 190/110 mm. of mercury. The patient and the family should be informed about the possible side effects as well as the rationale for the use of the therapy.

Eight patients were treated with anticoagulants and at last report were getting along very well, without recurrence of attacks. In two other cases complete thrombosis of the basilar artery occurred despite anticoagulant treatment and the patients died. A high proportion of the patients in the series had ischemic attacks, which often were not recognized by their family physicians, for as long as four years before the occurrence of a thrombotic episode. For this reason a report of some of the typical ischemic attacks as described by patients in the group studied would appear worthwhile.

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Presented before the Section on Psychiatry and Neurology at the 89th Annual Session of the California Medical Association, Los Angeles, February 21 to 24, 1960.

REPORTS OF CASES

CASE 1. A 55-year-old hypertensive white woman described many episodes of severe vertigo occurring almost daily for four years before the occurrence of an acute thrombotic episode. Three months before she entered the hospital she had a severe episode of vertigo which was followed by deafness in the right ear. Severe vertigo also occurred at the time of the thrombotic episode, which left her with multiple palsies referrable to the cranial nerves, severe dysarthria and bilateral long-tract signs. At last report the patient was in a rest home receiving terminal care.

CASE 2. A 42-year-old white man, observed in neurological consultation, had a history of periodic alternating hemiplegias, blurring of vision and severe dysarthria. Quadriplegia developed while he was in the hospital, and administration of anticoagulants was immediately started. At last report he had been doing well for two years and had returned to work. Bilateral carotid arteriograms in this patient were entirely within the limits of normal.

CASE 3. A 44-year-old white man gave a history of having two types of ischemic attacks: (1) Mental confusion and almost complete loss of vision in both eyes, lasting from 2 to 5 minutes, (2) severe vertigo with quadriparesis. After repeated attacks in the period of a year, anticoagulants were administered. Two weeks after this therapy was begun the patient suddenly died and at autopsy a pontine hemorrhage was observed. Pronounced calcification in the basilar and vertebral arteries was seen in x-ray films of the skull.

CASE 4. A 50-year-old hypertensive white man gave a history of having had severe attacks of vertigo, circumoral numbness, dysarthria and weakness of the left arm and leg daily for three months. One typical attack was witnessed by the author who noted that during the attack the patient had vestibular nystagmus, pronounced dysarthria, depressed corneal reflexes, left-sided pyramidal tract signs and slight mental confusion. These signs disappeared within five minutes, except for the depressed abdominal reflexes and the left extensor plantar response. When last observed the patient had been receiving anticoagulant therapy for four months and was free of ischemic attacks.

CASE 5. A 57-year-old white man complained of periodic episodes of dizziness, diplopia and unsteady gait for five months. At times he had as many as ten of these attacks a day. Three months before entering the hospital the attacks began to be associated with circumoral numbness. The day before entering, he had an episode of severe vertigo, nausea and vomiting and numbness of both the upper limbs. The final day, complete occlusion of the basilar artery occurred after one of the typical spells, and pathological examination confirmed the clinical impression.

CASE 6. The patient, a 65-year-old woman, had had repeated attacks of vertigo, dysarthria, diplopia, numbness of the right side of the face and paraparesis lasting from 1 to 5 minutes for five days before she was observed in consultation. When last observed, she had been receiving anticoagulant therapy for three months and had had no more ischemic attacks. An x-ray film of the chest showed pronounced calcification of one aortic arch.

Headache was one of the most common symptoms in patients with ischemic attacks as well as in those who had occlusive episodes without a definite history of neurologic disease. The headache was usually in the suboccipital region and, while not severe, often was painful enough to cause the patient to use an analgesic drug. Very often headache preceded the thrombotic episode. Some investigators believe that headache in such cases is secondary to dilatation of the external carotid artery.[2] Very frequently the terminal thrombotic episode began with suboccipital headache.

Paralysis of various types, involving two, three or four limbs was also commonly noted in patients with basilar artery occlusion. Visual disturbances, ranging from almost complete loss of vision in both eyes to slight blurring of vision in one or both eyes, were extremely frequent. Diplopia in one or more than one field of gaze was observed in 13 of the 35 patients. Tinnitus was not a common symptom. Sensory disturbances of various types were elicited in the history taking, the most common being circumoral numbness and numbness of one side of the face and the opposite side of the body. Twenty-three of the 35 patients gave a history of vertigo, generally speaking not associated with tinnitus. Only one patient reported loss of hearing.

Conjugate gaze palsies or impairment referrable to the third, fourth or sixth cranial nerve on one or both sides were frequently noted. Of special interest was the case of a 55-year-old woman with a history of hypertension, rheumatic and arteriosclerotic heart disease who had a sudden episode of syncope lasting five minutes. When she awoke, bilateral third nerve palsy was noted. She died later of a massive occlusion of the right middle cerebral artery, and at autopsy cystic changes were observed in both oculomotor nuclei. Visual field defects, including altitudinal field defects and cortical blindness, were noted in seven patients. In a number of cases adequate examination of visual fields could not be carried out. Bilateral facial and pharyngeal weakness or paralysis was noted in 25 patients. The corneal reflexes were characteristically absent or depressed in the great majority of the patients who died or were under terminal care at the time of this report.

Sensory examination of severely ill patients was of little help in establishing a diagnosis. In the case of patients who were having ischemic attacks, the history of circumoral numbness or paresthesias involving one or both sides of the body was undeniably one of the factors in establishing a diagnosis.

The motor system was involved in 34 of the 35 patients, and history of bilateral tract involvement was given by all of the 25 patients who died or were under terminal care at the time of this report. Dysmetria and dysdiadochokinesia were also quite frequently noted; but in the case of severely ill patients with pronounced involvement of the pyramidal tract, observation for these signs was not feasible.

Either unilateral or bilateral extensor response to plantar stimulus was noted in all patients in the group who died or were under terminal care. Abnormality of abdominal reflexes was also noted in all such patients. A tendency to plantar response was noted also in patients who were having minimal ischemic attacks, even in the period when they had no symptoms.

Three of the patients became akinetic and mute but were able to understand spoken directions.

Calcification in the carotid, basilar or vertebral arteries, or in branches of the thoracic aorta, were observed in six patients.

Spinal fluid examination was carried out in 26 cases. In 13 of them the protein content was above 50 mg. per 100 cc. The highest value obtained was 164 mg. In one patient the cerebrospinal fluid pressure was 240 mm. of water, the only case in which pressure exceeded 200 mm.

Two of the patients died while receiving anticoagulant therapy; in one of them (previously mentioned) death was believed attributable to the drug. The other patient, after being symptom-free for about a year, suddenly became quadriplegic, anarthric and comatose at his home. He died and at autopsy thrombosis of the basilar artery was noted. One hypertensive and diabetic patient who refused anticoagulant therapy was living and well at the time of this report, two years after onset of symptoms, except for periodic attacks of vertigo.

In electroencephalograms, obtained in six patients, no specific pattern was noted, only generalized slowing.

All but two of the 21 patients who died were examined neuropathologically at autopsy. Of these patients, eight had the thrombotic lesion at the level of the junction of the vertebral and basilar arteries. Five of them had thrombosis in the distal end of the pons with resultant infarction in the distribution of the posterior cerebral arteries and superior cerebellar arteries. In the remainder of the cases there was rather diffuse thrombosis with areas of infarction extending throughout the distribution of the basilar artery. In the cases discussed in this paper, it will be seen that these ischemic attacks are fairly classical. The physician who makes such a diagnosis should institute therapy, if there are no contraindications.

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California Medical Association Medical Motion Pictures

DAYTIME FILM SYMPOSIUMS, like those that were so popular during the 1959 and 1960 Annual Session of the California Medical Association, are being planned for the 1961 meeting, April 30 to May 3, 1961, Ambassador Hotel, Los Angeles. Evening film programs will be planned for physicians, their wives, nurses and ancillary personnel.

Authors wishing to show films should send their applications to Paul D. Foster, M.D., California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5. All authors are urged to be present, as there will be time allotted for discussion and questions from the audience after each film.

Deadline: November 1, 1960.

An "Integration Conference" in a General Hospital

WALTER R. BUERGER, M.D., Covina, PHYLLIS WRIGHT, M.D., and ELAINE BEAM, M.S.W., Los Angeles

• **An "integration conference" has been devised to bring about an integrated approach by the whole staff of a hospital to the whole patient in his whole environment. The aspects of the environment which the conference served to integrate included the family, the hospital, and all its disciplines, and the community and all its available resources. The conference was found to be of value to the patient, his parents, the interns and residents, the specialties in the hospital, the hospital as a whole and the community.**

THE MYRIAD of responsibilities associated with internship and residency often results in a tendency to treat patients as cases rather than as people. A more integrated approach to the mental, emotional and social aspects as well as the physical problems of patients has long been recognized as desirable.[2,3] To accomplish this, one of us inaugurated a monthly "integration conference" for medical-psychological problems in the pediatric department at Harbor General Hospital, Torrance, nine years ago.

The name integration conference proved to be particularly apt, since we were trying to integrate several different factors of a complex problem. These factors included:

1. *The patient himself.* He was to be treated not as a physical problem or as a mental or emotional one, but as a whole person.

2. *The patient's environment.* His social, as well as his physical environment.

3. *Our own disciplines.* Pediatric, social approach, teaching, psychiatric and psychological appraisal.

4. *The community's facilities.* Special schools, family service agencies, mental hygiene clinics, probation department, mental institutions and the like.

The term, integration conference, which was originally chosen for its teaching value in emphasizing the treatment of the whole patient, has been used ever since.

In the integration conference we saw patients who had physical disorders with large emotional components, especially chronic or recurrent illnesses like asthma, epilepsy and mental deficiency. An attending pediatrician, pediatric residents and interns, pediatric nurse, occupational therapist, social worker, teacher, psychologist and, when available, a psychiatrist, first discussed the child's problem, each from the point of view of his specialty. Then the parents, with or without the child, were interviewed; and after they were dismissed, the child's problem was discussed further and recommendations made. These recommendations were then discussed with the parents by the integration staff member best qualified to interpret them—usually the intern or resident.

From the Harbor General Hospital, Torrance.
Submitted October 30, 1959.

In order to present problems in an orderly manner, a regular procedure was followed:

1. *Presentation of medical aspects* of the problem by pediatric intern or resident. This included physical findings, results of laboratory tests, x-ray studies, electroencephalographic tracings and other data, as well as his impression and reasons for referral to the conference.

2. *Social aspects* by the social worker. She had already contacted the child and his parents and also had easy access and good rapport with other social workers in the hospital and social agencies in the community.

3. *School report* by teacher. We were fortunate that the local school district supplied a full-time teacher for children in hospital. Often the teacher had visited the child in the hospital or, if not, had easy access to other teachers who had.

4. *Mental and/or emotional testing* by psychologist. Not only was an estimation made of the child's intelligence but personality tests such as Rorschach, Goodenough, Bender and Gestahlt were evaluated. Also, after the psychologist had spent two or more hours with the patient, his total evaluation of the patient's behavior was invaluable.

5. *Psychiatric aspects* (by the psychiatrist). Unconscious motivations in patients and families were clarified, which helped in classification of emotional developmental material. On several occasions the psychiatrist made a specific diagnosis of a psychiatric or psychosomatic illness.

6. *General discussion.* Residents and interns were drawn into discussion and encouraged to raise questions and make comments. "Brain-storming"[1] for off-the-cuff ideas and thoughts of the entire group was encouraged.

7. *Interview* with parent or parents with or without the child's presence. The interview was led by the attending pediatrician or psychiatrist, but some questions were accepted from the group.

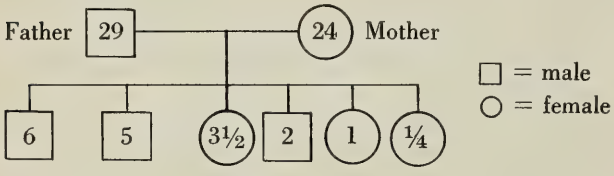
8. *General discussion* after the patients had left the room. At this time an opportunity was given for all to contribute ideas, many of which were specific and constructive.

9. *Recommendations* were made.

10. *Conveyance of recommendations* to parents was carried out as previously described. The social worker then had the responsibility to follow up on the recommendations and report to the group at a later date.

Reports of the cases of three patients will illustrate some of the values of the integration conference. The first is that of Janet L., whose presentation was both of teaching value and of value to the patient and her family:

Medical aspects. The patient, a girl three and a half years old, had a 29-year-old father, a 24-year-old mother and five siblings. The family constellation was as follows:



At 18 months of age, the patient was first brought to the hospital *in extremis* with chronic malnutrition. She weighed 15 pounds, had pneumonia and probable mental retardation as a result of old subdural hematomas. At the time of operation for removal of the subdural hematomas, pronounced atrophy of the brain was noted. When discharged from the hospital (after several weeks) the patient weighed 20 pounds.

A year later, after repeated broken appointments and follow-up letters, the patient was returned, dirty, malnourished, still weighing 20 pounds. A pneumoencephalogram showed bilateral cortical atrophy. Eight months later the call came in, "Send an ambulance; my baby is in a coma." The patient then was extremely emaciated, weighing only fifteen and a half pounds, with multiple perineal furuncles. During two months in the hospital, treated only with food and vitamins, the patient gained 15 pounds, and started to say a few words.

Social aspects. In light of repeated failure to keep clinic appointments and three episodes of starvation, there was question in the minds of the members of the house staff as to whether the child could be adequately cared for at home. On the other hand, perhaps anticipating some legal action in this regard, the father had hired an attorney to be sure to retain custody which seemed to indicate the child was not unwanted.

Interview with parents. The parents expressed a desire to take the child, to build her up and to keep all future appointments at the hospital. They said that they had missed previous appointments because they had not known they had any. They explained that they had been unable to visit the child during regular visiting hours because they were both working; and that when they did visit, they missed seeing the physicians who were assigned to her because the physicians were off duty. They both expressed concern about the child's temper tantrums and her failure to eat.

General discussion, recommendations and follow-up. It was decided to keep the child in the hospital for a longer period for further medical treatment, to secure developmental testing and meanwhile to get an interview with the mother by a psychiatrist. Developmental testing indicated that the child, who was three and a half years old, had a developmental level of 18 to 24 months, with some spotty achievements up to three years. The psychiatrist, after a private interview, did not feel that the mother was willfully destructive, although there may have been unconscious death wishes because the child was very hard to manage. As a result of these interviews the parents accepted foster home placement, which temporarily both relieved the harassing home situation and was beneficial to the child.

The integration conference served the following functions in this instance:

Clarified for the house staff the rejection feelings of a mother for a "brain damaged" child.

Brought out that neither parent was psychotic or had conscious infanticidal tendencies. (This was in contrast to the house staff's previous opinions due to the indescribably neglected appearance of the child.)

Emphasized the inadequacy of quick clinic visits with changing medical personnel, and the need of parents for a specific regimen to follow.

Brought about a voluntary acceptance by the parents of the proposal of a foster home.

* * *

A second child who benefited from presentation to the integration conference was a boy with a previously undiagnosed incipient psychosis:

1. *Medical aspects.* The patient was an 11-year-old boy who was under observation for a convulsive disorder. He had had several febrile convulsions in early infancy, then none until he had typical bulbar poliomyelitis at the age of ten years, necessitating several weeks in a respirator and elective tracheotomy. During the time he was in hospital for poliomyelitis, he had several more clonic convulsions and

was noted to be a "behavior problem." Thereafter anti-convulsant therapy was administered by a private physician until the patient was admitted to Harbor General Hospital for further study.

While on the children's ward he was noted to have a precocious vocabulary, to be a "lone wolf" and to be so assaultive toward the smaller children that he had to be restrained in a private room. His mother related the onset of all his behavior difficulties to the attack of poliomyelitis the previous year.

Because the seizures were very bizarre, did not respond to anticonvulsant treatment and appeared to be brought on at will by the patient, he was presented for review at integration conference.

Review of the hospital records during the episode of poliomyelitis indicated that the patient definitely had bulbar poliomyelitis without evidence of encephalitis, and that he had never been anoxic. (In other words, contrary to his mother's belief, it was felt that his behavior and "seizure" difficulties could not justifiably be considered a result of poliomyelitis.)

2. *School aspect.* A history was elicited of difficulties with truancy, lying and stealing, and assaultive behavior beginning in kindergarten (five years before he had poliomyelitis). Although his intelligence quotient was 95, he had a poor attention span and spotty academic achievement.

3. *Psychiatric aspect.* After reviewing a battery of psychological tests and interviewing the patient and his mother, the psychiatrist reported that the patient was a juvenile schizophrenic, and recommended admission to Camarillo State Hospital Juvenile Service for treatment.

Interview with mother and follow-up. The mother was at first very resistant to this diagnosis and refused to permit admission to the mental hospital. She preferred to try to manage the patient with the help of a mental hygiene clinic and our pediatric clinic.

After one year during which he gradually deteriorated, his case was again reviewed in integration conference, and at that time his mother agreed to voluntary commitment in Camarillo. At Camarillo the diagnosis of schizophrenia was confirmed, and after months of psychotherapy as an in-patient, the patient was able to return home considerably improved.

In this complicated case, review in the integration conference served to clarify the diagnosis and to help the mother agree to appropriate treatment. Of especial help in this child's case were the contributions made by the school teacher in documenting the behavior problems before the patient had poliomyelitis and by the psychiatrist in arriving at the final diagnosis.

Another patient, a boy with high intelligence and multiple congenital defects, also benefited from an integration conference.

1. *Medical aspects.* The patient was a 5-year-old Negro boy who had been in hospital almost his entire life for the treatment of multiple congenital anomalies including extrophy of the bladder, bilateral hydronephrosis and hydro-ureters, absence of abdominal muscles and congenital dislocation of the hips. After maximum hospital benefit was obtained from pediatric, urological and orthopedic care, it was decided to return him to the care of his father and stepmother and to observe him periodically in the outpatient department.

2. *Social aspects.* The patient's biological mother had disappeared shortly after his birth. His father, age 28, then married a 17-year-old girl and they had recently had their first baby. Because the mother was busy with this infant, and had never known or felt any responsibility for the patient, she was opposed to accepting him into their home. From the first she voiced doubts as to her ability to look after his medical problems such as the care of his indwelling catheter; and after a trial period of several weeks she returned him to the hospital, saying she could no longer keep him at home.

3. *School aspects.* Preliminary intelligence testing indicated that the patient had a superior intelligence in the range of a quotient of 125 to 130.

4. *Interview with stepmother.* The stepmother still voiced doubts about her ability to handle the patient's physical problems.

5. *General discussion.* The stepmother's rejecting attitude now seemed understandable in view of the complexity of the physical care required and the stepmother's youth and inexperience. It was agreed that the patient needed a warm emotional climate and that foster care or even the hospital ward where the routine was familiar and the staff friendly might be preferable to a family who rejected him.

6. *Recommendations and follow-up.* It was agreed to keep the patient in the hospital until just the right foster home could be found. Although at first this appeared to be an impossible search, by stressing to potential foster parents the patient's attributes, his intelligence, his responsiveness and his real need, a suitable foster home was found. The patient thereafter lived happily in an excellent home. He maintained, through the child placing agencies of the community, good rapport with the hospital staff but obviously preferred and was proud of his new parents and new home.

As a result of integration conference, the tendency on the part of some members of the house staff to force this child upon his father and stepmother disappeared. Greater insight into the situation re-

sulted in an opportunity for a child with multiple congenital defects to develop into a happy, emotionally well-adjusted child.

In these and other cases the integration conference had a definite therapeutic as well as a teaching value for the participants. It was of therapeutic value to:

The patient. He sometimes gained in understanding of his own problem; he always benefited from a greater acceptance and understanding of himself by the house staff. Often, integration of the old information on a child resulted in a new viewpoint and in new material being uncovered. No unpleasant repercussions or criticisms have been noted as a result of inviting a child to attend the conference.

The patient's parents. Parents had an opportunity to talk out their problems in a conference centered around their child. Often they were extremely pleased by the interest shown in them by so many people. Sometimes they had an opportunity to express resentments toward the hospital for misunderstandings that inevitably arise. They also benefited from greater acceptance and understanding of their child and of themselves by the house staff. Beneficial results were enhanced if both rather than just one parent attended the conference. Here, too, no unpleasant repercussions or criticisms were noted afterward as a result of inviting the parents to attend the conference.

The integration conference was of teaching, or one might say of learning, value to:

The interns and residents. They learned an integrated approach toward the patient, seeing him as a whole, rather than as just another physical problem such as "a case of congenital deformity." They also learned to see parents as people with problems, and not as annoying disturbers of routine. They likewise were more likely to call on the social service department in all cases for the help they had found the department able to give. Their enthusiasm and desire to have the conference held helped maintain it through times of tribulation and lack of personnel when the temptation might have been to discontinue it.

The specialties. It was satisfying to find the integrated efforts of the pediatrician, psychiatrist, psychologists, teachers, social worker and nurse resulting either in a complete or partial solution to the patient's problem; or in a recognition that the problem was too complex to be solved by the efforts of any one person working alone.

Better support and direction was given to social service in helping to solve problems. Previous to the conference, the social worker sometimes had the feeling that she was struggling all alone with a problem in which no one else was particularly interested.

Better use was also made of the teacher's observation of the behavior patterns of children. She became more alert and interested and more free to bring facts, otherwise overlooked, to the house staff's attention. Closer integration of the medical, social service, nursing and teaching departments in the hospital make for more effective treatment and therefore less complaints to the hospital administration regarding misunderstandings and actual or fancied inadequacies of patient care.

The community. The public health department, bureau of public assistance, probation department, family service and mental hygiene agencies all were involved in some of the cases dealt with by the conference. Better integration of their facilities was of benefit to patient and agency alike.

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CORRECTION

The term *heat prostration* was erroneously used in a case report published on page 350 of the May issue of California Medicine. The proper epithet for the condition described by the author is *heat stroke.*

Bone Banks

A New Concept in Procurement and Storage for Homologous Grafts

LEONARD MARMOR, *M.D.*, Los Angeles

• **An unlimited supply of bones, obtained postmortem and irradiated to make them sterile, is stored for as long as six months in a freezer, ready for use. After an immune response at first, bone thus treated is readily incorporated by the host in grafting procedures.**

A SUPPLY of an unlimited amount of bone for grafting has always been a great problem to surgeons. In children this has been an even greater problem as there is no ready source. In the past, bone banks were composed of sterile specimens obtained in the course of various surgical procedures. For example a rib may be obtained from a patient undergoing thoracotomy. This is a very limited source of homologous bone for replacement.

By a new method of procurement the division of orthopedics in the Department of Surgery at UCLA Medical Center has obtained large amounts of sterile homogenous bone for transplantation to patients who require bone grafts of all types and shapes. This is the first bone bank of this type to be established on the West Coast, although the method employed has been utilized for several years in medical centers in the eastern section of the country.

The method that is used to sterilize the bone was worked out by Turner and co-workers[3] and depends upon the use of a Van de Graaff 3 million electron volt machine.

The bone is collected postmortem from suitable bodies under clean but not sterile conditions. The grafts are immediately packaged in plastic bags which are heat-sealed, then placed within two outer bags for additional protection. They are stored in a freezer chest until they are irradiated. After irradiation the grafts are stored up to six months in a freezer, ready for use.

Irradiation with less than 3 million electron volts is not considered adequate for sterilization of the grafts. Cobalt 60 radiation may be used but cannot compete with cathode radiation because of practical considerations.

Most surgeons prefer obtaining bone from the patient at operation, since they feel this is the best bone available for grafting purposes. As previously stated, however, bone cannot be obtained in this manner from children; also in many cases additional bone may be desirable but not used simply because prolonging the operating time might endanger the life of the patient. With a sterile bone bank available, that problem is solved.

In the past, homologous grafting has been rejected by surgeons because the results were not very good. Such grafts were prepared by various techniques such as boiling, removing the organic portion of the bone by various chemicals or rendering the bone sterile by soaking it in antiseptic solutions such as Merthiolate.® It was shown conclusively by Holmstrand[2] that the crystal size in bone that has been heated by any of these methods is larger than in normal bone and is absorbed at a much slower rate by the host. A recent observation that has not been stressed is that autogenous cortical transplants and homogenous cortical transplants are unequivocally incorporated at approximately the same rate by the host.

In a manner similar to other tissue homografts, fresh bone homografts produce an immune response by the host. The degree of this response is determined by the genetic incompatibility between the donor and the host.

In our bone homograft, no cells survive; however, fixed bony contact between the host and the graft is maintained and the nonviable matrix of the graft is invaded by osteogenic cellular elements from the host. Osteogenesis continues until the graft has been replaced entirely by the host. These grafts succeed by offering internal, mechanical, replaceable fixation and a scaffold to guide the osteogenic elements of the host.

Even in autogenous grafts, few cells survive. It has been shown that diffusion is limited to 0.2 mm. in bone matrix under the best conditions, so that most cells die unless they are close to the surface or the graft is revascularized very shortly after transplantation.[1]

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Submitted October 20, 1959.

Therefore, the viability of the transplanted osteocytes is not a major factor in either the autogenous or homologous graft. Early progress of the homologous graft may be delayed by the immune response, but the ultimate outcome is the same unless the graft has been altered in some manner by procurement or storage. Bone secured under the method described for our bank most closely resembles unaltered bone.

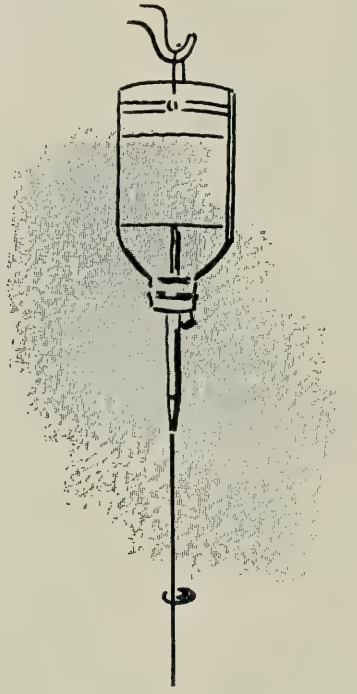
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Treatment of Thrombophlebitis

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• **Venous stasis, injury or alteration of the intima and alterations in the coagulability of the blood are the three most common etiologic factors in thrombophlebitis. Usually at least two of these factors must be present before the clinical manifestations of the disease develop.**

A plan of treatment based on correcting these three factors has been used in over 250 cases of thrombophlebitis, and it is believed that a significant decrease was brought about in the acute and long term disability and in the occurrence of complications.

The program consists of absolute bed rest in a hospital for about a week, elevation of the foot of the bed, administration of anticoagulants and adenosine-5-monophosphate for at least six weeks, progressive ambulation after the fourth day of treatment, with avoidance of prolonged standing and sitting, and adequate elastic support. Treatment must be continued until the patient has returned to full, normal activity and all signs of phlebitis have disappeared.

THROMBOPHLEBITIS, especially of the veins deep in the legs, is a relatively common, acutely disabling disease. Complications and sequelae can cause death or long and severe disability. Because it has a decided tendency toward progression and recurrence, an understanding of etiologic delineations is necessary for successful treatment.

Attempts to treat thrombophlebitis as a disease with a single cause have brought about very little benefit. In observing a series of cases of thrombophlebitis, it soon becomes apparent that there are multiple etiologic factors and that in most instances at least two or three of them are present before the disease develops to a clinical stage. It is obvious that not all the etiologic factors are known, but the three major and most common factors are those pointed out by Virchow[13] in 1860 and recently emphasized by Keefer.[7] These are venous stasis, injury or alteration of the intima, and alterations in the coagulability of the blood. A plan of treatment based on correcting these three factors has been used in over 250 cases of thrombophlebitis dealt with by the authors in the last five years. We believe that this plan of treatment has resulted in a significant decrease in the acute and long term disability and complications of thrombophlebitis. In addition, observation of the patients and their response to treatment has suggested some additional etiologic factors and forms of treatment. Many failures of treatment in the past have been due to discontinuance of it when the patient left the hospital. Certainly, if treatment is worthwhile, it should be continued until there has been completion of the process of organization, recanalization and endothelialization of the occluded veins and compensation of the collateral venous and lymphatic channels.

STASIS AND EDEMA

Elevation of the foot of the bed on shock blocks 6 to 8 inches high, as advocated by deTakats and Jesser,[4] is one of the most effective methods of improving venous return from the pelvis and lower extremities. Wright and Osborne[16] showed that this about doubles the venous flow rate. It also promotes lymphatic drainage. Pillows are not good for the purpose because they become dislodged and obstruct venous return. Elevation of the lower half of the bed while the upper part remains flat does not aid drainage in the pelvic area. Cranking the feet up and the head down causes painful hyperextension of the lumbosacral region. While frequent deep breathing and coughing, early ambulation and vigorous exercise of the legs prevent stasis and are excellent prophylactic measures, they have no place in the initial treatment of acute thrombophlebitis because of the danger of causing an embolus.

On the diagnosis of acute thrombophlebitis of the deep veins of the legs, we prescribe absolute bed rest with the foot of the bed elevated on 6-inch shock blocks. The head is kept dependent most of the time, but is elevated for meals and during use of the bedpan. After adequate prothrombin levels have been obtained and all of the edema and most of the pain and tenderness have cleared, gradually increasing ambulation is started. This is usually about the third or fourth hospital day. Walking is for five minutes four times the first day, ten minutes four times the second day, and then more and more. When patients return home they may walk as much as they wish, but for at least three weeks they should avoid prolonged sitting or standing in one position. At home,

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elevation of the foot of the bed is continued for two to six weeks or as long as there is any remaining edema in the leg or foot on awakening in the morning. The patients are encouraged to obtain work that combines walking and sitting and are instructed to walk a few minutes of every hour while on automobile, plane or train trips.[3]

In addition to elevation, edema is controlled by rubberized elastic support, which has been shown by Wilkins and associates[14] to increase the venous linear flow rate five-fold. This support is usually in the form of a 4-inch bandage from the toes to below the knee, and a 6-inch bandage from below the knee to mid-thigh. The bandages are rewrapped at least every eight hours. If after two to three weeks there is no significant edema of the thigh, the upper bandage is discontinued. Elastic support to the level of the knee is worn during the day for at least six weeks and as long as there is any edema in the lower legs or ankle at the end of the day or if there is discomfort on dependency.

If the swelling or discomfort is mild, tailor-made elastic stockings are substituted for the bandages at the end of six weeks. Patients are encouraged to lie down and elevate their legs at 45 degrees for 15 to 30 minutes several times a day. Also, swimming and wading are very effective in reducing edema. In patients who have recurrent thrombophlebitis, after a previously inadequately treated episode, heavier support such as gum rubber Rochester bandages or Aero-pulse® boots are sometimes necessary.

Another factor in the production of edema and venous stasis is the reflex vasospasm that often accompanies thrombophlebitis. In cases in which this is severe enough to cause the low temperature and pulselessness of the leg which raises the question of arterial insufficiency, a liter of 5 per cent alcohol with 50 to 75 mg. of Priscoline®[8] given intravenously over a two to three-hour period will usually bring about warming of the leg and foot with bounding pulses and considerable relief of pain. If spasm is a problem, after the adequacy of the arterial blood supply has been ascertained in this way, a heat cradle is kept over the legs. If rest pain or cellulitis or lymphangitis is a problem, the elastic bandages are omitted and the leg is encased in bulky hot compresses applied from toes to groin and kept warm by a heat cradle at 100° to 105° F. Usually after two to three days the hot compresses can be discontinued and elastic bandages applied. Winsor's[15] demonstration of the ability of the phenothiazine derivatives to block conditioned vasomotor reflexes may be of help to us here as well as in the treatment of certain sequelae.

Adenylic acid or My-B-Den® therapy in the form of an adenosine-5-monophosphate sustained action gel intramuscularly, as originally advocated by Boller[1] and Rottino,[11] was given to about 75 per cent of the patients in the present series. This is a muscle enzyme substance which, among its actions, is a mild vasodilator. We feel that it has produced considerable objective and subjective benefit and we plan to test this impression with a double blind study. This substance does not appear to have any effect on the intravascular clot, but seems to decrease and keep at a minimum the perivascular inflammation and the associated induration and neuritis. This effect is most apparent in superficial thrombophlebitis in which induration of the perivascular fat is readily palpable. There also appears to be a more rapid clearing of edema. Forty milligrams of the sustained action gel is given intramuscularly daily for three days, then 20 mg. daily until the patient is discharged from hospital, and then 20 mg. three times a week for six weeks. Sublingual tablets were tried but seemed to be ineffective. Rectal suppositories seemed to us to be as effective as intramuscular injections, but apparently they will not be made commercially available due to excessive cost of production.

Of course other factors which cause stasis, such as heart failure and hypotension, are vigorously treated.

INTIMAL INJURY

While it is generally recognized that stasis and altered coagulability of the blood often persist after the onset of thrombophlebitis and unless treated will result in extension of the process, the possibility of further intimal injury is often overlooked. Unevenly wound tight elastic bandages, prolonged flexion of the edematous leg, resting the involved leg on a small ridge, even on a firm pillow, all can cause further intimal injury. Injury of a different type is that produced by reaction to the clot lying in the lumen of the blood vessel both distal and proximal to the area of actual thrombophlebitis or by infection in the intravascular clot. Recognition and avoidance of the first group of these possibilities plus the measures undertaken for the control of stasis, edema and altered coagulability are adequate to control further injury except in the case of infection. The great majority of cases of deep thrombophlebitis and many cases of superficial thrombophlebitis are not associated with infection. However, perivascular infection can result in all three of the factors of intimal injury, stasis, and altered blood coagulability and thus can be the cause of thrombophlebitis and of its persistence or extension.[9] The superficial veins lie in tissues more liable to infection secondary to injury, folliculitis or lymphatic transmission, and thus are more frequently the site of thrombophlebitis due to infection. The edema secondary to thrombophlebitis of course predisposes to infection which in turn can cause further phlebitis.

After the onset of deep phlebitis the soft intravascular clot is an excellent culture medium and can result in the conversion of a transient bacteremia by a virulent organism (from a superficial infection or introduced by intramuscular injection) into serious septicemia. We have seen such a course of events result in serious septicemia which kept a young woman near death for over two months before recovery without residual or recurrence during subsequent pregnancy and surgical operation.

In all cases of thrombophlebitis in which the patient continues to run a high or spiking fever or has evidence of concomitant lymphangitis and regional lymphadenitis on an infectious basis, a blood culture is obtained and antibiotic sensitivity tests are carried out. After the blood for culture is obtained, the patient is started on antibiotic therapy, usually with one of the drugs that are effective against most strains of staphylococcus and streptococcus. It should be emphasized that our use of antibiotics in thrombophlebitis has been the exception and not the rule.

During the first half of this series of cases, we determined the erythrocyte sedimentation rate before the start of treatment. There was no significant correlation between the result of this test and the severity of the disease and it was not of any aid in arriving at a diagnosis in questionable cases.

ALTERNATION IN COAGULABILITY

The clotting of blood and the prevention of clotting in the living state involve complex processes and factors which even today are not completely understood. However, it is known that an increase in any one of a number of coagulant factors can result in a greater clotting tendency. Conversely, an increase in any of a number of anticoagulant factors not only can negate this increased clotting tendency but also can cause a considerable decrease in the ability of the blood to clot. Knowledge of these various factors is important in prophylaxis of thrombophlebitis, but, from the standpoint of treatment, exact knowledge of the clotting mechanism is not necessary. Small but significant alterations in the coagulability of blood have been difficult to measure with the usual tests. However, silicone coagulation times, prothrombin consumption and heparin retarded clotting times seem to reflect these changes more readily. We have not yet used these tests extensively but have hopes that they will be of aid to us in determining when treatment should be instituted to prevent or abort an early attack of thrombophlebitis, particularly in patients with a history of recurrent attacks. Observation of patients with recurrent attacks has borne out the observations by others that corticosteroids[5] and stress[6,12] can produce rapid changes (within minutes or hours) in the coagulability of blood. Thus, in one patient recurrent, full blown episodes have accompanied the forced marriage of her wayward son, stressful family reunions, and the like. Likewise alteration of the constituents of the blood have also resulted in increased clotting tendencies. Polycythemia with its accompanying increase in thrombocytes can result in rapid and extensive propagation of the thrombus. Conversely, as was pointed out by Quick[10] once a clot has been formed, anemia with its increased clot retraction and consequent increased local concentration of thromboplastin also can cause the thrombus to enlarge. Except for the obvious necessity for correction of such factors as anemia, the only really practical method available for altering the coagulability of blood is the use of anticoagulants such as heparin and the coumarin drugs. While they do not necessarily result in correction of the specific factor which has caused increased coagulability of the blood, in most (but not all) cases they bring about a favorable reversal of the ratio of coagulation factors to anticoagulation factors in the blood. They do not dissolve the clot. However, Burt[2] showed they do usually effectively prevent further propagation of the clot and speed its resolution. Heparin is probably the superior anticoagulant, but it is expensive and administration of it is difficult and time consuming. We have used it only in cases in which an embolus has already occurred or there are other factors making it advisable. Even then we shift to the coumarin drugs after a few days. While there are many excellent drugs, we prefer Coumadin sodium® because of the relatively short lag period and the predictability of dosage. Before it is given, a prothrombin concentration base line is obtained. Then an initial dose of 30 to 60 mg. (usually 40 mg.) is given. Twelve to 18 hours later an additional 10 mg. is given. Thirty-six hours after the initial dose a second determination of prothrombin concentration is carried out and almost invariably it is in the therapeutic range (15 to 25 per cent). Daily dosage is then based on the result of the prothrombin concentration while the patient is in the hospital. This is usually 10 mg. a day, but has varied from 2.5 to 25 mg. After discharge of the patient from the hospital, anticoagulant therapy is continued for at least six weeks (prothrombin concentrations being determined weekly) and until all signs of active phlebitis have disappeared and the patient has returned to full, normal activity. We believe it is important to continue coumarin therapy during the period of organization, recanalization and endothelialization of the clot. With increasing activity the requirements of anticoagulant drug are usually increased. When the base line prothrombin concentration is depressed significantly or a subsequent level is greatly

depressed due to overdosage or hypersensitivity, the concomitant administration of vitamin K_1 oxide (5 mg. orally), with one or two doses of Coumadin® has resulted in stabilization of response and greatly increased ease of management.

That anticoagulant therapy does not solve all problems was well illustrated by the case of one of the patients in the present series who had a second pulmonary embolus after six months of continuous anticoagulant therapy. The prothrombin concentration value at the time of embolization was 15 per cent.

While the foregoing program of initial hospitalization, elevation, progressive ambulation, elastic support, adenylic acid and anticoagulant therapy is somewhat more vigorous and prolonged than that usually advocated, we believe it has produced better results, both in our hands and those of others reporting series.

The usual period of stay in hospital has been seven days. The period of disability has been three to five weeks, and the incidence of recurrence and sequelae such as chronic edema, varicose veins, ulcers and stasis dermatitis has been low. We have frequently seen femoral neuritis at about three to six weeks from the onset of the phlebitis and late reflex vasospasm, both of which have responded well to treatment in most cases. Our experience with fibrinolysin has been limited but we have been impressed with its possibilities, especially in cases of early small clot or pulmonary embolus. We have used two types of intramuscular trypsin but have noted no benefit from either of them.

The regimen herein described modified but did not control, the course of the disease in a few cases (less than 5 per cent of the series). In two of these the addition of inferior vena cava ligation solved the problem, but we hope that a careful analysis of the others with recurrent symptoms and recurrent acute attacks may give us a better understanding of the entire disease process.

We strongly believe that the appearance of incompetent perforating veins, varicosities and recurrent stasis ulcers in the late phlebitic state are indications for surgical treatment.

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Poison Control

Operation of an Information Center in a Rural and Agricultural Community

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• **The Fresno Community Hospital Poison Control Center has been in operation for about three years, under the sole directorship of the pathologist. All expenses are paid by the hospital. It has served a definite need in the community. As an agricultural and more or less rural community, it shows more poison cases having to do with plants, insecticides, kerosene and fertilizers than do urban communities.**

In March, 1957, the Fresno Community Hospital started a poison control center, the purpose of which is to quickly supply information to physicians on poisonous substances of all kinds, the amounts contained in various industrial, agricultural and household compounds, the relative toxicity, the symptoms and treatment.

The Fresno County Medical Society and the administration of the Fresno Community Hospital recognized early the special need for such a center in a city such as Fresno, which is surrounded by a large rural and agricultural community. The center has operated in a unique fashion; it is located in the pathology department under the sole direction of one man, the pathologist. The board of trustees of the hospital supports it financially, realizing that hospitals have certain obligations to the community which are not subject to pecuniary measurement.

The pathologist or his assistant is on call 24 hours a day every day. He has in his office a complete library of books, handbooks, encyclopedias, pamphlets and memoranda on poisoning, and he and his assistant have duplicate copies of some of the literature in their homes. Additional sources of information, especially as to botanical poisons, have been organized and other physicians with specialized interests are consulted as necessary. Also, the pathologist's secretary has been taught how to use the reference works to find out the ingredients of various poisonous compounds.

Manufacturers of poisonous substances have been cooperating more and more with requests for information on their products. Special mention must be made of Abbott Laboratories and Smith, Kline & French Laboratories, who have compiled lists of their products and information on overdosage, symptoms and treatment, as was suggested by the Medical Section of the Pharmaceutical Manufacturers Association.

The card poison index system as supplied by the National Clearinghouse for Poison Control Centers has also been of great assistance. Its eight supplements are an excellent source of information.

From the Department of Pathology, Fresno Community Hospital, Fresno 21.

Submitted January 20, 1960.

Appropriate therapeutic agents are kept handy in the Fresno Community Hospital emergency room and are available to any physician at any time. The Fresno County health officer has been immensely helpful, and the Fresno *Bee*, a daily newspaper with a circulation of over 130,000, has done the community a resounding service in publicizing the Poison Control Center. Now and again the *Bee* alerts both the profession and parents to the hazards of poisoning and the precautions and first aid measures necessary to prevent unnecessary disaster. The pathologist, who is the director of the center, has spoken in its behalf before interns, residents, physicians, Parent-Teacher Association groups and others.

Although we have publicized that the sole function of the poison control officer is that of supplying information to physicians, when a layman calls every effort is made to give him information for proper first aid. If necessary, he is told to contact his physician immediately. If the poison involved or the quantity absorbed is quite dangerous, the poison control officer will ask the caller the name of his physician and call that physician personally as to the nature of the poison and possible avenues of treatment. Or, if the caller seems to be distraught or of low intelligence, the duty staff at the center makes the call to the private physician. Upon each call, the date, age, name, sex, telephone number, physician, type and amount of poison, method of exposure and interval since the time of ingestion are recorded and tabulated.

In our advice for treatment we make great use of information as to the relative toxicity of the substance ingested, in relation, of course, to the patient's age. The book *Clinical Toxicology of Commercial Products* by Gleason, Gosselin and Hodge is

very helpful in this respect. Often a mother is uncertain whether a baby actually ingested the poison in question. If the baby is young and/or the poison has a toxicity rating of three or higher, emesis and lavage are suggested. Lavage is suggested even if several hours have elapsed since its ingestion, because it is well known that a large amount of toxic matter can be retained in the stomach or adhere to its wall.[5] Moreover, in cases of attempted suicide, the patient may purposefully withhold the true time of ingestion.

Since in addition to age, sex and socioeconomic conditions, the factor of locale also influences the availability of certain poisons,[1] the center has undertaken a study of accidental poisoning in the Fresno metropolitan area for the first six months of 1959. Data were collected from our poison control center, the Fresno Emergency First Aid Center, the Fresno Community Hospital, Saint Agnes Hospital, the Fresno County General Hospital, the Fresno Veterans Administration Hospital, Madera County Hospital and the Fresno Osteopathic Hospital. Private physicians, especially pediatricians, were asked to tabulate poison cases treated in their offices which had not come to the attention of any of the above mentioned centers or hospitals. In a little over 70 per cent of cases the patients were four years of age or less, in about 10 per cent they were between five and fifteen years of age, and the remaining 20 per cent were adults. Data on the incidence of poisoning by various agents are given in Table 1.

TABLE 1.—*Data on Agents Involved in Cases of Accidental Poisoning in Fresno Metropolitan Area in First Six Months of 1959*

	No. Cases	Per Cent of Total No. of Cases
Internal medicines for humans:		
Aspirin	66	18.8
Barbiturates	39	11.1
Tranquilizers	13	3.7
Laxatives	5	1.4
Analgesics other than acetylsalicylic acid	8	2.3
Other	20	5.7
	151	43.0
External medicines for humans:		
Antiseptics	5	1.4
Other	15	4.3
	20	5.7
Household preparations:		
Soaps, detergents	10	2.9
Bleaches, disinfectants	6	1.7
Waxes, polishes	6	1.7
Other	19	5.4
	41	11.7
Pesticides:		
Organic phosphates	5	1.4
DDT (dichloro-diphenyl-trichloro-ethane)	5	1.4
Rat poison	2	0.6
Ant poison	2	0.6
Other	15	4.3
	29	8.3
Petroleum distillates:		
Crank case oil	1	0.3
Lighter fluid	2	0.6
Gasoline	2	0.6
Kerosene	10	2.9
Others	10	2.9
	25	7.1
Cosmetics	13	3.7
Plants:		
Castor beans	4	1.1
Oleander	6	1.7
Fertilizer	2	0.6
Other	2	0.6
	14	4.0
Paints, lacquers, varnishes, solvents	11	3.1
Other	24	6.8
	35	9.9
Gases and vapors	3	0.9
Kool-Aid® from galvanized iron containers	20	5.7
Total	351	100.0

DISCUSSION

Cann, Neyman and Verhulst[3] reported a comprehensive review of 4,000 poison cases from 29 poison control centers in various sections of the country. Their data on the incidence of poisoning by ingestion of various substances were much like ours, but we did have certain peculiarities. Serving an agricultural community, we see a relatively large proportion of cases involving pesticides, like organic phosphates and dichloro-diphenyl-trichloro-ethane (DDT); and as a rural community we have more cases of kerosene poisoning and of poisoning by plants such as castor beans and oleander. Special mention should be made of the cases of poisoning that resulted when children drank a commercial dehydrated drink preparation (Kool-Aid) from a galvanized iron container. The drink was permitted to stand in the metal container for some time after it was mixed. Soon after they drank it the children began vomiting. All soon recovered without treatment. Zinc was found on analysis of the drink. Two similar outbreaks were reported from two other localities involving soft drinks prepared in containers lined with copper and tin. Laboratory reports showed the presence of copper in each preparation. Fruit acids are known to have a corrosive action on certain metals and care should be exercised in the type of container used in mixing such beverages. Plastics,

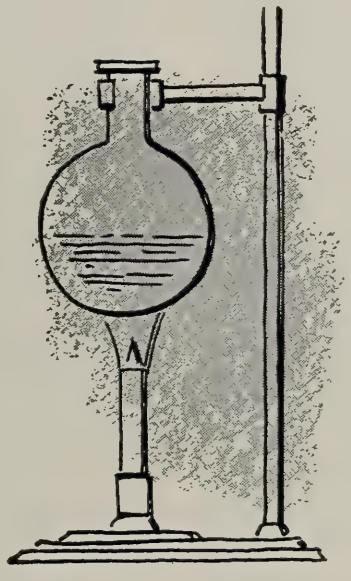
glass, enamel or crockery vessels should be used instead of metal.

Some poison control centers have a salaried medical director and a technical director, but obviously in a smaller one like the Fresno center, where the average number of telephone calls per month is 20 to 30, such personnel is unnecessary. All that is needed is a physician who is sufficiently interested and who can be on hand. The author feels strongly that no question of money or of pay should ever directly or indirectly come between the center and the person calling for information.

Fresno Community Hospital, Fresno and R Street, Fresno 21.

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Epidemiology of Accidental Poisoning

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• **In San Jose, California, studies of cases of accidental poisoning showed that the greatest hazard was to children 1 through 3 years of age. Drugs accounted for half the cases, household products for another third, and insecticides and rodenticides and others for the remainder. Most often poison material was within easy reach of the children. An analysis of families in which an accident occurred indicated that accidental poisoning might happen to any family. Since there was little after-effect of poisoning in cases in which treatment was obtained promptly, education directed toward getting prompt treatment seems most advisable. Community agencies interested in poison control need to focus their attention on parents of pre-school children.**

PUBLIC HEALTH OFFICERS in particular and the medical profession in general have shown considerable interest in the problem of accidental poisoning among children in the last decade. The reports of Press,[4] Arena,[1] Wheatley,[5] Jacobziner,[2] and Mellins, Christian and Bundesen[3] have been milestones in this field. With the growth in interest have come various poison control programs and professional information and treatment centers. Hospital cases of various types have been the ones most frequently reported, but they have probably been weighted with a higher proportion of more serious cases. In San Jose, we have had experience with a wide variety of accidental poisonings, some serious and severe, but a large number of the less serious kinds. Our experience appears to be more typical of what might be recorded if all cases of accidental poisoning were known.

In San Jose at the City-County Emergency First Aid Station, we have had a Poison Control Center, cooperating with the National Clearing House for Poison Control Centers, since February, 1957. This station has a physician and nurse on duty 24 hours a day and provides emergency care in all kinds of accidents. The station was established through the joint efforts of the Santa Clara County Medical Society and the city and county governments. It is operated under their policies and directed by the city health officer. Before 1957 the station provided treatment facilities and served as a source of information regarding poisons on an informal basis. Ever since it was established, we have kept statistics on the age and sex of the patients treated at our Emergency First Aid Station. Since September 1, 1958, the San Jose City Health Department has been conducting research in the field of home accidents with financial support from the National Institutes of Health. We have been collecting data by means of interviewing the families of children who were accidentally poisoned. Although primarily concerned with measuring these families' experience with home accidents of all types, we have learned a good deal about the nature of accidental poisonings.

Substances ingested

Our experience in San Jose with the substances ingested accidentally is similar to that reported in other studies. Aspirin was the greatest single offender; it was the poisoning agent in approximately one-third of all cases. Drugs of one kind or another are the cause of poisoning in at least half of the cases (see Table 1).

Age of susceptibility

Some 95 per cent of all poisoning cases occurred to children under five years of age. The rise in the susceptibility at the end of the first year is very pronounced. In only nine of 254 cases was the child under one year of age and only 19 were four years old. The great bulk of cases occurred at ages one, two and three.

Circumstances

In the vast majority of cases the substances were within reach of the child. Often the mother remarked that usually the aspirin was kept at such and such a place, but "for a second or so I left it on the kitchen table." A number of cases occurred when a child was in a home not used to small children and the precautions necessary in the storage and use of potentially poisonous materials. In a very few cases the children showed unusual skill in climbing to usually inaccessible places and opening containers in order to reach the toxic material. These cases were a small number.

Priorities for education

A preliminary analysis of the characteristics of families experiencing a case of accidental poisoning would seem to indicate that the possibility of such an event's occurring is universal. Many families who

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TABLE 1.—*Data on Accidental Poisonings Occurring to Children Five and Under, Treated at Emergency First Aid Station, by Substance Ingested, by Age and Sex, San Jose, California, September 1957 through August 1958*

	Total Cases	Males							Females						
		All Ages	—1	1	2	3	4	5	All Ages	—1	1	2	3	4	5
All substances	254	136	2	44	49	32	8	1	118	7	32	43	24	11	1
All drugs	138	75		13	29	28	5		63	1	12	28	15	7	
Aspirin*	84	45		6	18	18	3		39		3	21	10	5	
All other drugs*	54	30		7	11	10	2		24	1	9	7	5	2	
Household preparations	64	35		19	15	1			29	2	14	7	3	2	1
Insect and rodent poisons	42	23	2	12	4	2	3		19	3	4	6	6		
Plants	9	2				1		1	7	1	2	2		2	
Unknown	1	1			1										

*Included in "All drugs" totals.

In addition to the cases listed in the above table, 9 additional cases were *listed* as accidental. They are as follows: (1) female, 16, ingested aspirin; (2) female, 22, ingested Super-Anahist; (3) female, 15, ingested toadstool; (4) male, 17, ingested "yellow jackets"; (5) male, 42, ingested Clinitest tablets; (6) male, 46, possible food poisoning; (7) male, 48, ingested unknown drug; (8) male, 53, ingested ant poison; (9) male, 70, ingested boracic acid. These cases plus those listed in the table comprise all cases treated at the Emergency First Aid Station in this period. There were no fatalities from accidental poisoning during this period. Only a couple of cases resulted in hospitalization.

experienced a case of poisoning were aware of the hazards involved in the substance and said that they had exercised care for years with other children. The poisoned child may have been the youngest in a family of three or four children in which none of the others had ingested poison. In light of this observation, it can be said that while education for prevention, as such, is worth while, a major priority in education should be in the direction of urging prompt treatment. For the vast majority of substances swallowed there were absolutely no aftereffects once the child was treated; whereas, if treatment had been delayed, death might have occurred. In addition to general public education for prompt treatment, community efforts should be directed toward establishing adequate treatment and information centers properly supported by the local medical profession. Unfortunately, a good bit of the literature on accidental poisoning suggests applying first aid measures before calling a physician. Our conclusion is that the call to the physician or emergency hospital should come first and instructions followed as directed after the call. These instructions may or may not be to administer first aid. A suggested course of action should take cognizance of local conditions. In an isolated rural area where medical attention would not be readily available, first aid procedures should be emphasized. Proper storage and handling of poisonous materials should, of course, be stressed. Also many parents are unaware of the potential hazard of many drugs and household products. Products specifically labeled "poison" accounted for less than 10 per cent of the cases dealt with by the San Jose Center.

Target group for education

Our experience is that cases of accidental poisoning are concentrated primarily in the 1-through-3 age group. Parents of this group are often among the most difficult to reach with educational material. Physicians usually have more contact with parents of these children than do community agencies such as schools and health departments. Health departments should use the communication opportunities that exist through Pre-School Well Child Conferences and pediatricians and general practitioners for dissemination of educational material. General community education in addition may be useful, for not all cases occur in the home of the patient; some occur in the home of friends, grandparents and other relatives. Indeed, the hazard may be considerably greater in a home which does not have pre-school age children than it is in the child's own home.

Environmental safeguards

Locked medicine cabinets, special safety caps for drug containers, and adequate labeling of household products would all assist in the reduction of this problem, but such measures may not be depended upon entirely.

While there is no single answer to the problem of accidental poisoning in children, a concerted and well coordinated attack in any community will reduce somewhat the number of actual cases of accidental poisoning and should materially reduce or eliminate fatalities.

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Heart Disease Under Workmen's Compensation

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• **In expert testimony before the Industrial Accident Commission, all physicians are taken as equally competent. The value of their testimony depends upon the validity of their data and the reasons for the conclusions drawn. In case of conflicting opinion, the referees, who are laymen, must decide on the basis of the testimony. Therefore physicians preparing reports must see that data are complete, that all routine investigative procedures are not only applied but reported, and that the reasons for claiming connection of injury with employment are fully stated. Moreover, other recognized causes of the patient's condition should be considered and ruled out for reasons given.**

The increasing number of claims for workmen's compensation in heart disease, and the increasing tendency of insurers to settle rather than contest claims, may actually be harmful to the welfare of persons with heart disease, for it deters employers from hiring them and thus risking higher insurance costs. Physicians concerned with compensation claims must develop more widely acceptable standards that properly separate the inherent risk of heart disease from that incurred through employment for which the employer may reasonably be considered liable.

CURRENT CARDIOLOGY stresses the opinion that most persons with heart disease not only can but should work. Some heart disorders are transient, and in nearly all the patient is benefited by useful and remunerative employment. Industry would benefit from the skills of many persons who have heart disease, and society's burden in supporting them would be lightened.

Nevertheless, there is considerable resistance to their employment, often due to their own fear of effort but more often to the fear of employers that workmen's compensation insurance costs will be increased on the hiring of persons with known heart disease.

Coronary occlusion is the heart lesion most encountered in workmen's compensation cases, but employers make little distinction among heart diseases; all are feared equally without regard to their relative permanence.

TEST OF COMPENSABILITY IN CALIFORNIA

Any disease, disability or death which arises out of and occurs in the course of the employment in California is compensable.[1] While the extent of liability varies, it does not matter basically whether industrial strain induced heart damage or merely aggravated it.[2] The test of liability is the effect of the injury on the particular employee, not what it would have been on a healthy person.[3] If it merely aggravated an active, progressive and symptomatic condition, the employer is liable only for the effects of the aggravation.[4] If it is found that the injury hastened or produced death, the employer is wholly liable,[5] although the employee would have ultimately died of the disease.[6] If there were no symptoms prior to injury, and a disability is produced which did not previously exist, the condition is entirely compensable.[7]

It is self-evident—but worth stating—that disability due solely to the normal progression of a disease in an employed person is not an injury and is not compensable.[8] However, the Labor Code does not limit the meaning of "accident" to the conventional sense of that which is sudden, usually violent and often external. Likewise the Federal Longshoremen's Act, which applies to some California employees, regards as accidental injury any unexpected derangement of bodily functions.[9] The early and better reasoned decisions on heart injury recognized that to be distinguished from the natural progress of the disease the disorder must be precipitated by unusual stress or overstrain.[10]

The wording in at least two California decisions indicates that work strain plus episode of heart disease equal liability, and that the exertion or strain need not be unusual nor other than normal to the work.[11] However, neither case has eliminated the question of causal connection, which is one of fact.[12] Until the Legislature by statute compels a more consistent policy in the Industrial Accident Commission, the courts must affirm the award whenever there is competent substantial evidence of causal connection between work strain and heart injury.[13] Because the decision must be based on the facts in each case, a wide variety of causes for compensability have been found, some of them seemingly original in those cases![14]

Submitted January 4, 1960.

Referee, California Industrial Accident Commission; Lecturer, U. C. Extension Division; Law School, Graduate Division, U. S. C.; Author: Workmen's Compensation, Its Principles, Practice and Procedure, 2 Vols., 1935; California Workmen's Compensation Outline, 1951; Supplement, 1953; Second Edition, 1958; Supplement, 1959; Member, Rehabilitation Committee, Los Angeles County Heart Association.

IMPORTANCE OF MEDICAL TESTIMONY

While the law refers questions of pathology to "medical experts," whose opinion alone is competent to establish the cause of heart disorders,[15] no distinction is made among "medical experts." The general physician is legally as competent as the specialist, and conflicts of opinion among experts must be decided by the triers of fact[16]—laymen with no more than a superficial familiarity with medical problems. Moreover, since physicians' written reports may be submitted in lieu of oral testimony,[17] and this is usually done, referees of the Industrial Accident Commission rarely see the experts. The written report must speak for itself, and if it is incomplete in its factual content the conclusions drawn may be underrated or overrated. The rehabilitation of workers with heart injury will be furthered if physicians render reports that are complete both as scientific and as legal evidence.

THE ADEQUATE REPORT

The physician's duty in cases of heart injury before the Industrial Accident Commission is to present a discursive analysis for differential diagnosis and identification of causes. He must consider:

1. Condition of the heart prior to the alleged injury;
2. Severity of the injury and the parts of the body involved;
3. The type of injury—crushing, penetrating, strain;
4. Symptoms present at the time of injury and shortly thereafter and the time of their appearance;
5. What abnormal findings preceded injury;
6. Whether any lesion existed before injury and, if so, whether it was aggravated;
7. If strain is charged, what precisely was being done at the time;
8. Whether the activity was normal or unusual for the patient;
9. What effect it had on the patient;
10. What extracardiac complications are present and what effect they have on the patient;[18]
11. In case of death, the correspondence between necropsy findings and clinical history, especially with regard to time elapsing between the alleged injury and death.

The alleged injurious event must be completely narrated with all pertinent circumstances and with the time of onset of symptoms. Then all relevant clinical findings should be given, and also relevant personal and familial history. Then the patient's present complaints should be listed. In fairness to himself and to the patient, the physician should state what conventional diagnostic aids have been used, the dates when they were used and the findings. The diagnosis is the first basic conclusion in the report.

The preceding steps are, of course, routine in any thorough medical examination, although the reporting may be more detailed than is needed for purely clinical purposes. Then follows the relating of the findings to the alleged cause or to some other cause that may have been discovered in the examination. In other words, has the patient an industrial injury or solely a coincident illness?

To offset conflicting opinions, the physician should consider and rule out the other recognized causes of the diagnosed condition, giving his reasons for rejecting the other possibilities as well as for his own decision. The weight or value of any opinion depends upon the validity of the reasons assigned for it[19] and the facts from which it is drawn.[20] The author is convinced that such an orderly consideration of the possible causes for the condition, and the considered rejection of those not applicable, would result in a higher average of scientific value in the reports. More important, such a presentation assists the laymen who must decide the case. When a number of examiners have come to a number of different conclusions, each by his own approach without discussion of the other possibilities, the laymen face these fractional presentations without a common denominator.

Two notes might be added to this discussion: If it is accepted that a diseased heart can become "compensated to effort," employment need not be considered contributory to a death from chronic heart disease which has reached such a stage that death may ensue at any time, from any exertion,[22]—provided the employee was working within the range of effort compensation even though the normal work is heavy.[23]

If the physician is swayed by human sympathy for the claimants, let him remember that for every excessive or unjustified award of compensation which increases the financial risk of employers, literally hundreds if not thousands of persons with heart impairment are denied the chance to work.

IMPORTANCE OF HEART DISEASE CLAIMS

Diseases of the heart are today the most frequent cause of death.[24] Most acute episodes have their onset away from work, often while the patient is asleep.[25] Nevertheless, the causal connection between work and heart disorder has been claimed with increasing frequency if not increasing clarity. Beard and coworkers,[26] analyzing claims before the Industrial Accident Commission from 1948 to 1951, found there are no widely accepted hypotheses of causal connection in this matter among cardiolo-

gists* and that, being human, they are not always consistent when unknowingly reviewing the same case data. The result: The number of cardiovascular deaths with some industrial connection rose to an all-time high in 1958, although the Commission made fewer findings and awards in this connection than in any of the previous six years.[27] The difference was due to compromises and releases settled by insurors, and reflects their fear of the hazards of litigating such claims.

It is an unfortunate fact that as soon as litigation enters the picture, scientific procedures and attitudes become diluted by partisan enthusiasm, with the result that opinions are produced more for their economic value than for scientific worth. Until the medical profession has clearer and more universally recognized concepts of cause and effect, it will remain difficult to rehabilitate industrially the cardiac patient, because employers fear increase of compensation costs.

The author's conclusions are not unique. In an address prepared for a meeting of the Washington State Heart Association, Wilbur stated:

"It is probably true that, viewed from the physician's standpoint, courts have reached inconsistent conclusions on similar or even identical factual patterns. But a careful case by case review of . . . decisions will reveal that any seeming inconsistencies have resulted not so much from inconsistent application of rules of law as from variant medical opinions expressed in various cases. To one who understands the judicial process, inconsistent results may be expected where ostensibly qualified medical experts express contrary opinions regarding factual situations . . ."[28]

The respective functions performed by the legal and medical professions in manning the courts and furnishing technical expert testimony brings these groups into increasing contact. Although this may be regarded as a marriage of convenience rather than a case of "love at first sight," after all, there is the power of choice on the part of the medical expert. He does not have to enter the field of literary or forensic medicine. It is difficult not to criticize those who voluntarily enter the field and contribute so generously to its confusion.

There is a real need to recognize that every person with heart disease must engage in some activity. If that is commensurate with his general health and within the range of activity to which his heart has become compensated, death should properly be assigned to natural causes unless the effect of the accused event was so substantial that any fair mind would find it responsible. So, too, should recognition be given to the time elapsing between the accused event and the acute disease episode. Certainly a lapse of days should be questioned,[29] and an interval of a few hours considered more characteristic.[30] Lastly, the relative seriousness of the preexisting heart disease and of the severity of the accused event must be weighed.[31]

*Board-certified cardiologists and internists.

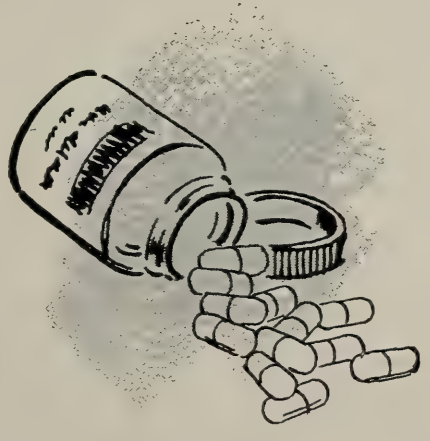
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Alcoholism in San Francisco

A Community Study and Recommended Program

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• **In a community health council study of alcoholism in San Francisco it was suggested that alcoholism be considered a disease that afflicts an individual, affects his family, constitutes a major public health problem and produces social and economic disorder in the community. It is recommended that alcoholism, like many other diseases, be approached through a broad program of professional and public education, research into epidemiology and study of more effective methods of prevention, treatment, and rehabilitation, and that patient services commensurate with the scope of the problem be provided. Specific recommendations emphasized the role of the medical profession and related professions and facilities in the prevention and control of alcoholism.**

ALCOHOLISM in California has been a source of growing concern to physicians, social agencies and both community and state government. The prevalence rate of alcoholism in San Francisco exceeds that in California and probably equals or even exceeds that of any community of comparable size in our nation. This health problem, which has profound medical, social and economic impact upon the community, has been studied for the past three years by a committee of the Health Council of the United Community Fund of San Francisco in cooperation with the San Francisco Medical Society. It is suggested that in the absence of an ideal treatment or specific cure, much might be accomplished through a combined and comprehensive medical, psychiatric, social and economic community effort directed toward research, public and professional education and increased patient services with reference to this disease or syndrome.

PREVALENCE OF ALCOHOLISM

San Francisco physicians, surveyed in a cooperative study by the San Francisco Medical Society and the Health Council, ranked alcoholism first among conditions with the greatest unmet needs for community health services or facilities and as one of the two top priorities to which the community should give more attention in health promotion and care.[6] Subsequently Babow, in a "Report on Alcoholism in San Francisco,"[1] provided more detailed information upon which are based the report and recommendations of the Community Health Services Committee which were adopted by the Health Council and the United Community Fund.[2] It is this material that is summarized in the present article.

The prevalence of alcoholism is extremely difficult to measure accurately because of emotional, cultural and other factors that favor concealment of the disease. Thus direct surveys not only are difficult and expensive but usually result in falsely low estimates. Statistics derived from records of deaths due to acute alcoholism, hospital admission rates for alcoholic toxicity and arrests for drunkenness are inaccurate for the same and many other reasons.

A formula developed by Jellinek,[5] based on the annual number of deaths reported as due to cirrhosis of the liver attributable to alcoholism, is generally considered the most practicable method available for estimating the total number of addicts to alcohol who are alive in a given area in a given year. The formula considers (1) the number of reported deaths from cirrhosis of the liver, (2) the percentage of such deaths that is attributable to alcoholism (based on autopsy studies), (3) the percentage of all alcoholics with complications who die of cirrhosis (based on autopsy studies) and (4) the ratio of all alcoholics to alcoholics with complications (based on clinical studies). The validity of this formula depends upon the concept of alcoholism that is used, the reliability of the reported mortality due to cirrhosis of the liver, and the extent to which the constant factors (points 2, 3 and 4 in the formula) apply for the time and place the formula is being used.

Applying the Jellinek formula to San Francisco gave an estimate of approximately 26,000 persons with physical or mental complications of alcoholism in this city with a total population of 791,000. Of the alcoholics, 84 per cent are men and 16 per cent

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are women. In addition Babow estimated there are at least 50,000 more men and women who have problems as a result of drinking such that they might be expected to receive help but who so far do not have the mental or physical complications of alcoholism.

Boyes[3] made the startling estimate that 20 per cent of the men and 10 to 12 per cent of the women in San Francisco are problem drinkers. He reported one-fourth of the patients at the San Francisco Adult Guidance Center, which is the Health Department outpatient clinic for alcoholics, are women.

Only an estimated 10 to 20 per cent of alcoholics are homeless, unattached, unemployed persons of the Skid Row type. The remainder are distributed throughout the community. Many are "hidden alcoholics," not known to the authorities or to medical or psychiatric facilities. A substantial number are not recognized as alcoholics by themselves, by their families or by their associates.

While many and perhaps valid criticisms may be directed against the application of Jellinek's formula to San Francisco, nevertheless other data confirm the relatively high prevalence rates of alcoholism in this city.[4] The death rate from cirrhosis of the liver (which in many cases is associated with alcoholism) is two and one-half times higher than the rate in California and over four times higher than the national rate. Over two-thirds of the 62,952 arrests reported by the San Francisco Police Department in 1955 were for drunkenness. Many of the persons arrested were repeaters, some 800 to 1,000 persons accounting for a substantial proportion of the total number of arrests. About 40 per cent of persons admitted to the psychiatric service of San Francisco Hospital, the city and county general hospital, are alcoholics. Thirty-six per cent of all patient admissions (excluding those admitted for observation) from San Francisco to California state mental hospitals in 1957-58 were for alcoholism.

Although the data indicate that San Francisco has a more disturbing problem with alcoholism than have many other cities and that this problem has been incompletely solved, there is also evidence that a greater effort toward solution has been achieved in San Francisco than in many other communities. It is estimated that 6,000 to 6,500 San Franciscans were under some sort of care for alcoholism in 1958 at various public and voluntary community and state facilities. However, this is less than one-fourth of the estimated 26,000 persons with physical or mental symptoms due to chronic alcoholism and does not include preventive or corrective measures for those in earlier stages of the affliction.

The estimated numbers of San Francisco persons under care for alcoholism at various community facilities in 1958 were as follows:

Adult Guidance Center (Dept. of Public Health)	1,200 to 1,300
San Francisco General Hospital (Dept. of Public Health)	1,700 to 2,100
Single Men's Rehabilitation Center (Dept. of Public Welfare)	400 to 500
State Dept. of Mental Hygiene	740 to 860
Various "half-way houses"	1,200 to 1,500
Northern California Service League	150 to 200
Voluntary general hospitals	100 to 150

It must be noted with regard to the foregoing data that in many instances a single patient received care from more than one facility.

The estimates do not include patients receiving care for alcoholism from physicians in the patient's home or a physician's office. Nor do they include persons who may have received some help for alcoholism from family service agencies, probation departments, pastoral counseling or outpatient psychiatric clinics other than the Adult Guidance Center. Also not included are patients who may have obtained help for alcoholism at federal government hospital or clinic facilities for veterans, members of the armed forces or the Merchant Marine. A large proportion of patients at these federal government facilities, however, are not San Francisco residents.

ALCOHOLISM AS A DISEASE

Alcohol has been a resource and alcoholism a human affliction for thousands of years. The use of alcohol has been accepted without censure in many cultures. More frequently, alcoholism, defined in various ways, has been considered a moral weakness, a willful sin or an offense punishable by law. A more modern concept views the moderate use of alcohol as apparently having no adverse effects on many individuals and as probably beneficial to many. Habitual dependence on alcohol, however, has become regarded as both a cause and a consequence of physiological, psychological, social and economic disorder. Alcoholism, as a disease or disease syndrome, is found to afflict vulnerable members of the population while leaving others with a seemingly similar exposure unscathed.

The disease, alcoholism, may aptly be compared with tuberculosis at about the turn of the century. The causative agent, alcohol, is known but not to be eradicated easily. Morbidity is in some measure related to the degree of exposure of a vulnerable host. Factors of individual susceptibility are not known. There is no specific cure. The stigma of social disapproval is attached to the disease. It is a chronic disorder subject to frequent relapse. Early diagnosis is difficult. Treatment requires a long program of care and rehabilitation, often involving

hospitals, clinics and other facilities. It affects all social strata although there seem to be greater concentrations of cases in some socioeconomic strata and cultural subgroups, and in certain geographical areas of a community which have a higher proportion of populations at risk. There are psychological, social and economic effects upon the family of the patient. Emotional, socioeconomic and cultural factors and family dynamics may play a part in the occurrence and recurrence of the disease. There is more than an occasional need for the use of authority, especially with reference to "recalcitrants." Relationships with law enforcement officials are often necessary. The disease results in an incalculable economic loss to the community not only in terms of income loss but also in increased social dependency and in care by governmental and voluntary community resources.

EDUCATION, RESEARCH AND SERVICE

There is ample precedent for dealing with a disease when the causative agent is known but cannot be eradicated, when factors determining host susceptibility and transmission are not identified, and when a specific cure is not available. First, the disease must be recognized for what it is and what it does. This necessitates professional and public education. Second, time, effort and money must be devoted to research in the hope of reaching and understanding of the pathogenesis, and ultimately prevention and cure. Third, early diagnosis is important in order that the patient may be treated with available (although admittedly far from perfect) methods, in order to save lives, reduce disability and curtail the social and economic ravages within the community. These principles of education, research and services are not new. They form the backbone of the programs of scores of public and voluntary health and welfare agencies as well as of the medical profession itself. They are techniques of proven effectiveness. They are fully and appropriately applicable to alcoholism as a disease that afflicts an individual, affects his family, menaces the public health and produces social and economic disorders in the community.

A COMMUNITY PROGRAM FOR CONTROL

Comprehensive studies made in cooperation with the San Francisco Medical Society and many public and voluntary health and welfare agencies in San Francisco, and with the help of a panel which included the Committee on Alcoholism of the American Medical Association and 36 individuals interested in and experienced in the local problem, have led the Health Council and the United Community Fund to propose a broad community program to control alcoholism in San Francisco. The recommendations are based on the knowledge that alcoholism is a disease affecting so many San Franciscans that it is a major public health problem for the entire community. Alcoholism should be attacked, as have similar problems in the past, with a vigorous community-wide program of education, service and research of sufficient magnitude to be commensurate with the problem.

From the studies came recommendations that such a program can best be carried out by the medical profession, hospitals and many existing public and voluntary health agencies, catalyzed by a strong and effective voluntary health agency that will foster, strengthen and coordinate education, research and patient service in the community. It is considered that funds to support such an agency can be developed on the basis that the program is a means to counteract and ultimately reduce the huge economic losses that alcoholism costs management, labor and other organizations as well as many families.

It is further recommended by the Health Council that efforts toward the prevention of alcoholism receive particular emphasis. It is clear that recognition of alcoholism as a disease, public education as to its nature and course, removal of the social stigma that now attaches to it, and early identification of the potential alcoholic, or problem drinker or "hidden alcoholic" are of paramount importance in the prevention of alcoholism.

These recommendations recognize that the prevention and treatment of alcoholism in the present state of knowledge require accurate medical, psychiatric and social diagnosis for the individual patient in a coordinated and continuing program of treatment with a family focus wherever possible, and preferably within the community. Recognized as essential in dealing with alcoholism are individual or group psychotherapy for the addict, work with the family by a social worker or clinic psychologist, vocational rehabilitation, and use of other community resources.

Particular recommendations are that the role of the practicing physician in the treatment of alcoholism be emphasized; that consideration be given to better deployment of psychiatrists, clinical psychologists, medical and psychiatric social workers and rehabilitation counselors; that efforts be made to develop more professional personnel who are trained, oriented, and interested in working with alcoholics and their families; that hospitals be encouraged to provide more inpatient care for alcoholics and arrange for outpatient care by private physicians or in clinics; that the principle of including care for alcoholism in health insurance contracts be explored further; and that there be a careful

review of laws, judicial and correctional procedures involving alcoholics with a view to effecting a further recognition that an alcoholic is not a criminal to be punished or isolated from the community but an ill person who needs medical, psychiatric, psychosocial or vocational help.

The fundamental long-term research into the basic causes of alcoholism as well as its physical, psychological, social and epidemiologic characteristics is recognized as the only means to an ultimate solution. Advances in etiology and control would afford huge economies in health, time and money for the entire community, as well as release the patients from suffering. Scientific method and common sense demand that appropriate time, effort and funds be made available and applied for this purpose.

An initial step was taken recently by the Bay Area Council on Alcoholism, which has sought to raise funds to provide a trained staff to help business and industrial firms establish programs for the early detection and treatment of alcoholics under medical supervision. The council, an affiliate of the National Council on Alcoholism, also plans to assist persons who are seeking information on alcoholism and to serve as a referral center for treatment and rehabilitation facilities in the area. Perhaps this council will develop into the strong community agency that has been recommended.

The study of alcoholism in San Francisco stressed the role of physicians in the care and rehabilitation of alcoholics. The practicing physician is in a strategic position to recognize the early symptoms of alcoholism, to identify the "hidden alcoholic" and to work with the patient and his family. The "Manual on Alcoholism" prepared by the A.M.A. Committee on Alcoholism is recognized as a useful and authoritative guide for the medical management of alcoholism. Also the psychotherapeutic function of the physician as counselor to patients and their families is of at least equal importance; and he can encourage the use of community resources in the treatment and rehabilitation of a patient. The physician can render preventive care to the spouse and children of those afflicted.

The availability of short-term care for alcoholic inpatients in general hospitals is essential for their medical, psychologic and sociologic care. In this connection the successful demonstration at Mt. Zion Hospital and Health Center in San Francisco that alcoholic patients can be given inpatient care on an unsegregated basis without special nursing is noteworthy. The hospital setting provides an opportunity for necessary medical, psychiatric and sociologic diagnosis and preparation for a program of treatment and rehabilitation by the doctor using any community resources that may be required.

The San Francisco Medical Society has appointed a group of its members who have a broad knowledge of this disease to offer sound guidance to the profession and related organizations. This program on the community level reinforces and parallels statewide activity by the California Medical Association and the State Department of Health and the national effort of the American Medical Association.

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The Coroner and the Common Law

II. Functions of the Coroner

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THE OFFICE OF CORONER was created by the California State Legislature in 1876.

Under Sections 10400 and 10425 of the State of California Public Health and Safety Code, together with various sections of the codes of the component counties of California, the coroner is directed to investigate and in his judgment hold an inquest after death in the following circumstances:

1. A person has been killed.
2. A person has committed suicide.
3. Death is the result of an accident.
4. An injury is a contributing cause of death.
5. Death has occurred without medical attention.
6. The attending physician has been unable to state the cause of death.
7. There is reasonable ground to suspect that death was directly or indirectly caused by the criminal act of another.
8. Continued absence of an attending physician.
9. The physician of record was in attendance less than 24 hours before death.
10. A person has died suddenly.
11. The circumstances of the death are unusual.
12. Death has occurred through the instrumentality of some other person.
13. Death has occurred under any suspicious circumstances.

In addition to these provisions, there are nonstatutory responsibilities which a coroner may have to assume. For example, if a husband and wife die in the same accident without evidence of which died first, the medical presumption is generally that the wife died first, she being assumed to be the weaker of the two. In similar circumstances many life insurance companies, in order to provide payment to the beneficiary without litigation, hold that the husband died first. On the other hand, considering the present-day tax structure, it would be preferable in certain cases to presume that the wife predeceased her husband, for had her death been subsequent to the husband's she would inherit from him. The children, if there were issue, would in turn [in California] inherit her community half interest from her, thus charging two inheritance taxes against the estate instead of one. In such instances the coroner may be requested to state the time of death as well as the cause.

Review of these statutes reveals a vague, continuous sequence of developments in the medicolegal field paralleling our social evolution. Historically, there have been several episodes of progress through the years, interspersed with eras of retrogression and disintegration of the coroner's office. The basic provisions of our Health and Safety Code come from the old English common laws. These are:

a. If a person has been killed or died as the result of an accident, the coroner is directed to go to the scene of the death and hold an inquest thereupon.

b. If a person has committed suicide the coroner is ordered to investigate the death and thereafter to confiscate the property and belongings of the person. (Suicide under the English code was regarded as a major criminal offense, there being at the time the code was formulated no background of psychiatric understanding and social compassion, such as prevails today.) With certain recent exceptions this is still the case.

The beginning of the industrial revolution is reflected in provisions 3 and 4 of the list above—"death is the result of an accident," and "injury has been a contributing cause of death." In the medieval days of the coroner's office, cases in which death was a result of accident or in which injury had been a contributing cause did not assume major economic proportions. Accidents were common in everyday life and the economic liabilities accrued only to the injured person and his family. With the advent of the industrial revolution, society began to recognize the employer's responsibility for an employee's injury and/or death occurring from an accident, if it was due to negligence of the employer, or unnecessary industrial hazard, or other cause associated with one's employment. The gradual development of industrial accident commissions, double indemnity clauses in life insurance policies for accidental

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death, health and accident insurance and compensation coverage gave accidental injury and death a new pecuniary importance in addition to its historically tragic imputations. Many new problems developed for the responsible public officials in determining whether a person had met death through circumstances wherein someone else had a legal liability and a financial responsibility. With the further refinement of compensation insurance laws, it became necessary for the coroner to determine whether an injury which was the result of an accident occurring at work might be a remote or a contributing cause of death, and as such be compensable. In the ensuing years, illnesses arising (sometimes most tenuously) from industrial injuries have become compensable under the laws of the commonwealth.

It seems probable that most coroners in the past have been capable, within certain limits, of determining how a person was killed. They could also in some cases determine the presence or absence of criminality. They became adept at inquest technique. At this point their responsibilities and their capacities were exhausted. The multifold responsibilities currently assumed by medicolegal authorities in adjudicating the relative contribution of industrial poisons, physical injuries, personal negligence, psychiatric and psychogenic factors, or medical malpractice to illness and death could not be assumed by the untrained and unassisted coroner. These problems are products of our increasingly complex social-economic system, and progressively demand better facilities and services.

Methods of medicolegal investigation and the development of medicolegal training programs lagged far behind their parents, law and medicine. These newly developing socio-medicolegal problems disclosed not only that the existing officials, personnel and equipment of the offices of legal medicine were deficient, but that the regulatory statutes as well were inadequate. The line of distinction between natural and accidental death, suicide and homicide, mayhem and murder, assault and rape, arson and pillage is at times so fine that only with clearly defined authority can the most astute and well-trained investigators with the best of facilities be adequately discerning. Where there is a possibility of remote or minor injury by obscure means being a contributing cause of death, the intricacies of the problem are compounded, often even beyond the capacity of the well staffed modern coroner's office.

Over the past two centuries so many of the miscellaneous responsibilities of the coroner were transferred to other agencies that the duties of the coroner diminished to the simple and fundamentally objective inquest. He had to arrive at his conclusions only by observations made at the scene of death without investigation of the associated circumstances, for the privileges of investigation had been transferred to the police department or the sheriff's office. In 1926, as it had become apparent that no coroner, no matter how experienced and talented, could be reasonably expected to reach accurate conclusions without having more information than could be obtained by looking at the body at the scene of death, the State Legislature restored the prerogative of investigation to the coroner's offices in California. Most coroners then found themselves inadequately prepared to conduct investigations, as they were without trained personnel, proper equipment, work areas or staff-training facilities, and also without money to expand their office capacities. In states where medical examiner systems existed or have become operative, the medical examiner was by law a better qualified official and had more financial support, but the original terms of appointment have directed most medical examiners to be concerned mainly with death of homicidal or suicidal nature. Even the authority of the medical examiner did not at first include investigations into the industrial accident field. Currently, coroners in California (and medical examiners elsewhere) have the authority and the facility for such investigation.

Development of the Present Health and Safety Code

It is apparent that although the original four provisions of the Health and Safety Code covered the fundamental requirements in cases of homicide, suicide, accidents and injury, they did not cover the other medicolegal needs of society. As medical knowledge grew, the untrained official, whether lay or professional, was unqualified to meet the growing medical responsibilities of his office. It became necessary to acquire the services of scientists and physicians who could solve the academic problems of the office. Provisions 5, 6, 8, and 9 in the list printed at the beginning of this article are all concerned with the acquisition of medical opinion to establish the cause of death to substantiate the coroner's opinion as found by investigation and inquest. In review, these provisions cover:

5. Death which occurs without medical attention.

6. Death where the attending physician has been unable to state the cause of death.

8. Death which occurs during the continued absence of an attending physician.

9. Death where a physician has been in attendance less than 24 hours beforehand.

Three of these provisions (5, 8 and 9) mainly protect the public from the maneuvering of those who seek to make murder or suicide appear to be

death from natural causes. Two (6 and 9) provide legal and scientific consultation in the case of unaccountable death and protect the physician or health officer from being forced into the position of having arbitrarily (and perhaps erroneously) to certify to the cause of death. In such circumstances both medicine and society are better served by an official investigation.

None of the sections so far discussed covers the problem of violations of the Medical Practice Act, nonprofessional instrumentation or criminal abortion, with all the social, medical and religious cross-currents. Proviso number 7 authorizes the coroner to investigate obscure and intangible cases, including abortions, where he finds that "there are such circumstances as to afford a reasonable ground to suspect that the death was directly or indirectly caused by the criminal act of another." The coroner is protected by this article for he need have only a reasonable ground for suspicion. When deciding upon an investigation, he need at the inception have no specific facts or documentation, the death needing only to have occurred under suspicious circumstances and possibly by the criminal act of another either directly or indirectly. Considerable latitude in instituting and conducting investigations is implied by this rule.

Further authorization for the coroner to investigate became necessary because of the peculiar exigencies arising from drug addictions, untoward reactions to medication, collapse under anesthetics, chemical incompatibilities, allergic reactions, antibiotic sensitivities, organic and inorganic chemical poisonings, food intoxications, suffocation, carbon dioxide inhalation, industrial toxins, automobile accidents and ionizing radiation. Two provisions—"a person has died suddenly," and "the circumstances of death have been unusual"—give the coroner authority to investigate any such uncommon occurrences.

The mechanical age has had great impact upon our national health; and in many cases inexperience, negligence, carelessness, recklessness, alcoholism, incompetence and mechanical failure have been the instruments by which not only the principals and passengers, but also innocent bystanders and casual observers have been injured or killed by moving vehicles. Number 12, cases in which "death occurs through the instrumentality of some other person" covers all such circumstances. Cases of malpractice may also be legally investigated under this rule.

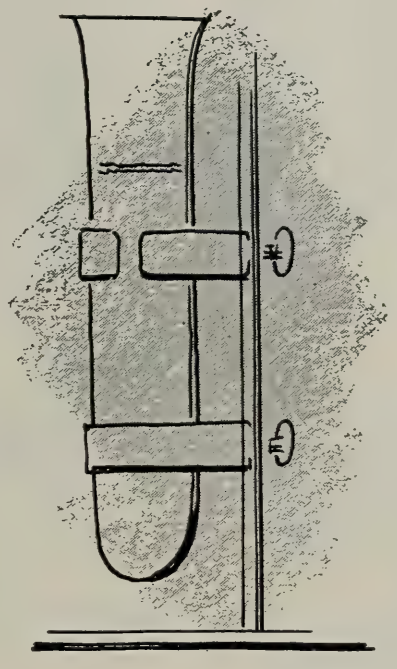
The reason for the inclusion of item 13, covering cases in which "death has occurred under any suspicious circumstances," is obscure but it obviously covers any situation not covered by the previous twelve directives, as well as any unforeseen new problems or situation which will arise in the strange new world of tomorrow. By this authority, a coroner may investigate any death that he decides is associated with any abnormal social or medical pattern or circumstances of behavior which may arouse his suspicion.

That such a motley, disorganized and overlapping group of sanctions, without sequence or continuity, should constitute the authority of a designated public official to investigate the medicolegal problems of a great commonwealth is a sad commentary upon the progress and evolution of statutory law in our generation. It is true that they provide the coroner with definite powers and provide him safeguards in the pursuit of his duty. It is also true that the public is provided with medicolegal services which are commensurate with the quality of the official's work. Practitioners of medicine are given academic assistance and at times the opportunity of confirming their medical conclusions by referring to a properly constituted office the confusing medical problems which arise. But they do not set standards, or behavior patterns of operation or minimal technical qualifications for employment or requirements for official election or appointment. Today, even in the best serviced areas, homicide, suicide, manslaughter and mayhem may occur unsuspected and undetected. Although the most dramatic and apparently still the most newsworthy of coroners' cases, these are no longer the prime circumstances of importance within the medicolegal pattern. Workmen's compensation laws, industrial accident commissions and compensation court awards have given the findings of the medicolegal offices a real and substantial pecuniary value. These findings also have far-reaching social values. For instance they may determine whether a widow must abandon her maternal status and go to work to support her family after the death of her husband, or whether by an industrial insurance award she may stay home to care for and educate her family. Verdicts can be instrumental in deciding whether children go to college or to day-labor, whether a mortgage is foreclosed on the family home, or whether a patient gets private medical care or hospitalization in a publicly supported institution. The apprehension of murder, the revelation of abortion, or the disclosure of charlatanism and malpractice are basically important, but they are currently less important economically than the accurate evaluation of the role of effort in inducing coronary thrombosis and heart failure, or the importance of silicosis, developed during employment, contributing to death from active pulmonary tuberculosis. The child, Industry, has outgrown the giant, Crime, in medicolegal importance within our modern civilization.

This obvious pyramiding of medicolegal responsibilities, both in scope and importance, has led to

general medical and legal confusion and disorganization, within which are alternating bright spots of progress and accomplishment. Education of the general public, the legal and medical profession, medical students, technicians, law enforcement officers and morticians is essential to the best future development of superior medicolegal service. Although meager, some courses are now being offered by various institutions for these purposes. Of first importance both to the public and the professions in this regard is some knowledge about death and of the immediate consequences. Who can sign a death certificate? Who can authorize an autopsy? Who may remove a deceased person from the place of death and when? Who may prepare a body for burial? Who may assume the responsibility for interment? Who are the legal heirs? These and many other items deserve subsequent discussion because they become important immediately upon the death of an individual anywhere in the towns, cities and counties of California, the United States of America, countries of the "civilized" world, and even to a more limited extent in less privileged areas.

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CASE REPORTS

Malignant Disease and Gastric Polyps

LEONARD BRESLAW, M.D., Beverly Hills

THE RELATIONSHIP of gastric carcinoma to gastric polyps is, as yet, incompletely determined. The opportunity to observe gastric polyps both roentgenographically and gastroscopically in a 65-year-old man in whom cancer of the stomach was seen at operation six months later has prompted the present report and a general discussion of diagnostic problems in cases of this kind.

REPORT OF A CASE

The patient, a 65-year-old white male shipyard worker who had been observed periodically in the clinic for two and a half years, noted onset of epigastric distress and bloating immediately after eating in the fall of 1957. There was no loss of weight or of appetite. On occasion the patient noted pain that he described as cramp-like, which was relieved by eating. There were no specific food intolerances.

The patient had had lead poisoning in adolescence. He had worked in soft coal mines, both in drilling and blasting capacities, for many years before his shipyard work of the last ten years. Family history was sketchy, but so far as could be determined none of his relatives had had cancer. Multiple sigmoid diverticula had been diagnosed on a previous examination in the clinic. However, with the patient keeping to a bland diet and taking antispasmodics, no abnormal discomfort had been present until the present complaints.

Upon physical examination no abnormalities were noted. The results of laboratory tests were within normal limits, except for the absence of free hydrochloric acid with histamine.

Because of epigastric bloating and fullness, x-ray examinations of the upper gastrointestinal tract was carried out October 3, 1957 (Figures 1 and 2). A small esophageal hiatus hernia was observed. It was not associated with reflux esophagitis or peptic ulceration of the esophagus. A well demonstrated polypoid lesion involving the anterior wall of the body of the stomach, midway between the greater and lesser curvatures, could be seen. There were some associated thickened folds in the area. In some of the films the lesion appeared to be a pedunculated polyp (Figure 1). In others it had a sessile appearance. In the radiologist's interpretation, these observations, in association with thickened folds,

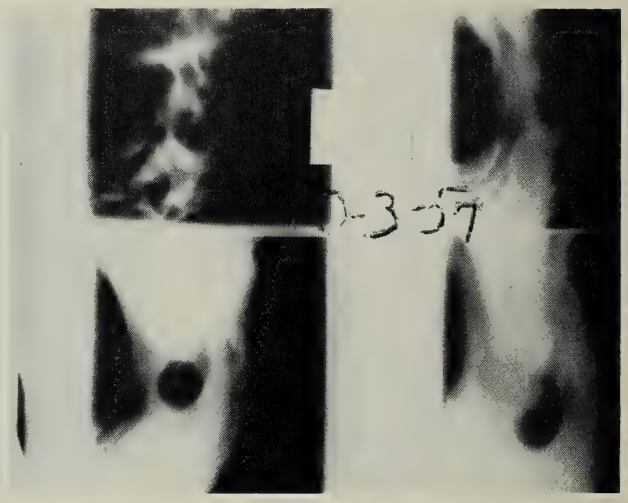


Figure 1.—Polygraphs, October 3, 1957, showing a polypoid, pedunculated lesion in the mid-body of the stomach. The suggested stalk is seen in the lower right hand corner film. Suggestive mucosal irregularity can also be seen.

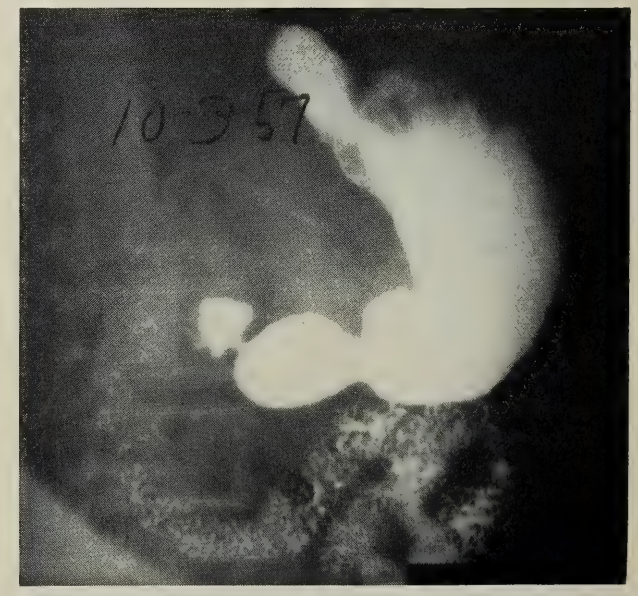


Figure 2.—Barium-filled stomach showing only minimal irregularity along the greater curvature in the area.

Submitted November 9, 1959.



Figure 3.—Upper gastrointestinal series, June 11, 1958, showing distinct infiltration in the area in question.

raised the definite possibility of carcinoma or lymphoma. Hence, the patient was referred for gastroscopic examination. On November 22, 1957, a flexible Cameron gastroscope was readily passed. The angulus, clearly visualized, was somewhat enlarged and thickened. The antrum was seen clearly. Normal peristalsis was seen throughout. On the anterior wall above the angulus there was a slightly irregular lobulated polyp about 1.2 cm. in diameter. Whether it had a stalk or pedicle could not be seen owing to its size and proximity to the wall of the stomach. Two other smaller polyps were seen on the greater curvature in the area immediately above the angulus. There was diffuse atrophy in the body of the stomach on the anterior wall and lesser curvatures.

The impression was of atrophic gastritis and gastric polyps. No evidence of carcinoma was seen. Periodic x-ray and gastroscopic examination was advised. There was little change in clinical symptoms in the next six months and no loss of weight or of appetite. On routine radiographic study of the upper gastrointestinal tract in June, 1958, the radiologist made the following report: "At fluoroscopy, the esophagus appeared normal. . . . The previously described polypoid lesion . . . appeared to be larger than at the previous study. The mucosal pattern in the region appeared somewhat disrupted. The remainder of the stomach appeared to be within normal limits." The conclusion was that the large polypoid lesion was presumed to be carcinoma until proven otherwise (see Figures 3 to 6).

Operation was carried out June 30, 1958. On the lesser curvature of the stomach just above the incisura, there was an indurated area about 4 cm. in diameter which, on gross inspection, appeared to be a superficial spreading carcinoma. In the center of the lesion, a polypoid mass was present about 2 cm. in diameter on a pedicle 6 to 7 mm. in diameter. On the posterior surface of the stomach, along the

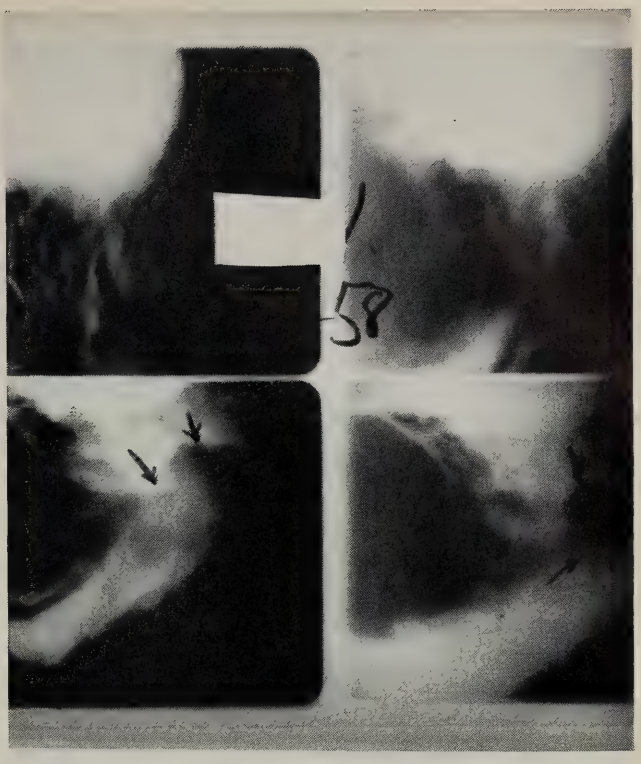


Figure 4.—Mucosal detail polygraphs showing definite alteration suggestive of malignant disease. The pedunculated character is no longer demonstrable.

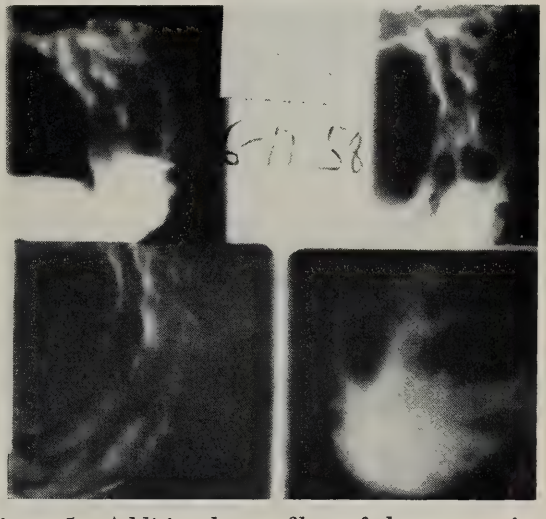


Figure 5.—Additional spot films of the mucosa in this area suggestive of polypoid malignant change.

greater curvature opposite the previously described lesion was another area of induration about 4 cm. in diameter which also grossly appeared to be a superficial spreading carcinoma (Figure 7). There were multiple nodes along the lesser curvature which appeared grossly to be metastatic. A node at the high lesser curvature at the esophageal hiatus was also removed for separate section.

There was no gross extension of the tumor or adherence to the transverse colon or the underlying pancreas. Approximately 85 per cent of the stomach was resected, and a Billroth I anastomosis was performed.

Gross examination. The pathologist reported: (1) A 1 cm. node replaced by tumor. (2) The greater omentum appeared free of tumor involvement. The specimen of stomach measured 17 x 10 cm. Three centimeters from one resected edge there was a tumor mass roughly 4 cm. in diameter and 1.5 cm. thick. At a distance of 3.5 cm. from it there was another tumor mass 4.5 cm. in diameter. This also resembled carcinoma on sectioning. It gave the appearance of a superficial spreading carcinoma beginning to produce a linitis plastica effect by encircling the stomach in a linear and annular fashion. On sectioning the tumor mass, white tumor could be seen infiltrating the muscle wall of the stomach almost to the serosal surface. Approximately a dozen small lymph nodes, the largest 1 cm. in diameter, were removed from the mesentery of the stomach. All appeared to be replaced by tumor. There was a suggestion of chronic antral gastritis with a cobblestone pattern on the mucosal surface. The tumor did not appear ulcerated.

Microscopic examination. Sections from the lymph node showed node replacement by well differentiated metastatic adenocarcinoma. Extensive antral gastritis with considerable intestinal metaplasia was noted in sections from the stomach wall. Specimens from the tumor revealed well differentiated adenocarcinoma, spreading along the surface of the stomach and spreading through the wall of the stomach to the serosal surface. The pattern was of a scirrhous carcinoma in one area. The diagnosis was adenocarcinoma of the stomach, with metastasis to regional lymph nodes.

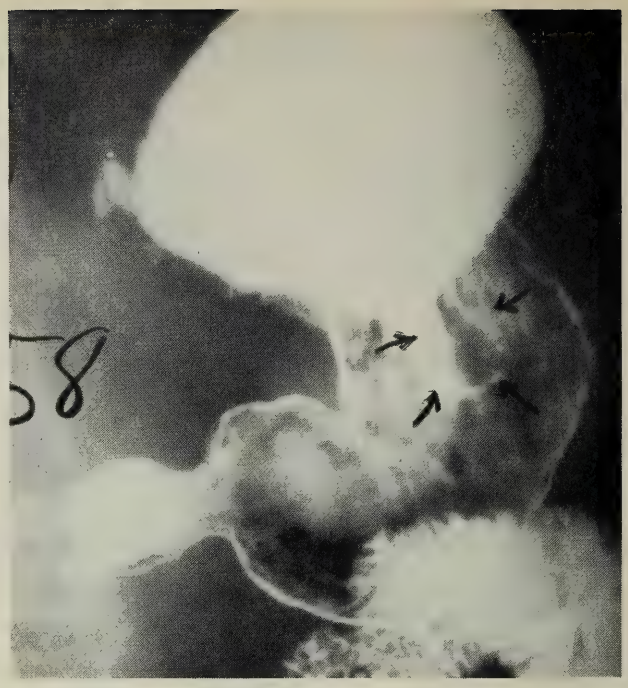


Figure 6.—Air-filled stomach demonstrating the polypoid character of the lesion on the posterior wall of the body.

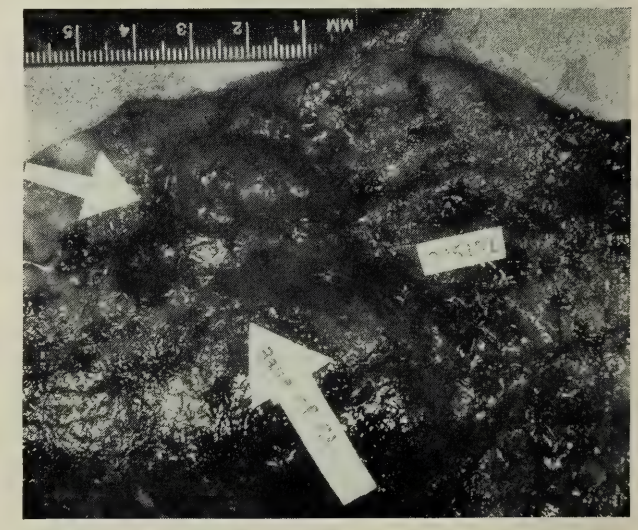


Figure 7.—Photograph of the resected specimen demonstrates the polypoid character of the malignant lesion.

Incidence

Buckstein[3] reported that in 21,026 autopsies in Bellevue Hospital from 1915 to 1938, 104 cases of benign tumors of the stomach were identified.

The general incidence varies from 0.25 per cent found by Spriggs and Marxer[9] in 4,400 autopsies to 0.7 per cent by Lawrence[6] in 7,000.

Malignant Degeneration

Buckstein[3] reported that of 31 gastric polyps, five had gross characteristics of benign lesions and that on microscopic section carcinomatous degeneration was evident.

Benedict and Allen[1] in 1934 reported on 17 gastric polyps examined at the Massachusetts General Hospital, seven of which showed some tendency to malignant change. Brunn and Pearl[2] in 1943 reemphasized the danger of malignant transformation in multiple polyposis of the stomach by reporting 84 cases, each with three or more polyps, in which 12 per cent were directly associated with carcinoma and 41 cases eventually developed malignant changes.

On the other hand, Carey and Hay[4] found no direct relationship between the development of carcinoma and benign gastric adenoma. They observed 20 patients with single benign adenomas for from one to nine years and ten patients with multiple benign adenomas for from one to seven years without development of carcinoma. Miller and co-workers[7] found malignant changes in eight of 23 gastric polyps. Rigler and Erickson[8] reported two cases in which a polyp was removed by local resection and cancer developed at the sites of resection, 18 months later in one case and 48 months later in the other.

Although the initial x-ray study in the case herein reported did show suggestion of a pedicle, the slight irregularity and thickening of the rugal folds around

the point of origin of the lesion made the radiologist suspect carcinoma or lymphoma initially.

The author can only reemphasize the importance of mucosal detail in the area surrounding the polyp. This irregularity, combined with fluoroscopic observation, served as the basis for a diagnosis of early malignant disease.

Gastroscopic Examination

The polyps in the present case were clearly visualized on gastroscopy. Nothing about their shape or gross appearance, including color, suggested malignant change. No ulceration or greyish discoloration was noted that might have suggested any but a benign process. They were so located and of such size that it was impossible to see whether there were pedicles at the point of attachment. Adjacent mucosal atrophy, normal peristalsis, and adequate distention have been noted by many observers in early lesions of this type.

SUMMARY

A case of a 65-year-old white man with minimal symptoms and identification of several gastric polyps is presented. On x-ray examination a pedicle was suspected, but the radiologist raised the suspicion of malignant disease on the basis of fluoroscopic "stiffness" and the radiologic mucosal irregularity in the area adjacent to the lesion. Gastroscopically, the polyp was identified and appeared benign by all usual criteria. In addition, several smaller polyps were seen in the area. Six months later, the radiologic picture was characteristic of malignant change athough there had been no change in symptoms. On exploration, metastasis to nodes, regional in nature, was already present. Pathologic section showed extensive chronic antral gastritis in conjunction with the adenocarcinoma (polypoid in type).

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Single Stage Resection of Seven Aneurysms

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Numerous medical centers are reporting many cases of resectional operation for arterial aneurysms. Relatively little has been presented, however, regarding operations on patients with multiple aneurysms, possibly because many patients who have multiple aneurysms are not candidates for elective operation. The following is a report of a patient having eleven aneurysms, in whom seven were resected in a single operation.

A 66-year-old Negro man was admitted to Loma Linda Hospital September 15, 1959, with a history of having first noted swelling in both femoral areas nearly six years previously. For the preceding three years these swellings had progressively increased in size. More recently the patient had noticed swelling in the left leg occurring when he sat and relieved when he stood or reclined. There had been no pain or tenderness, and the patient had been doing fairly active physical work until a few days before admission to the hospital.

The patient gave a history of having diabetes mellitus, controlled on low dosage of insulin. He knew of no heart trouble or hypertension. His father, he said, died at age 78 of hypertension.

The patient was 69½ inches in height and weighed 176 pounds. Pronounced arcus senilus was present. Blood pressure in the left arm was 130/100 mm. of mercury. A large pulsating mass was palpated in the lower abdomen, extending from just above the umbilicus downward across much of the right lower quadrant. The upper portion of this mass could be easily seen when the patient was in the supine position. Large femoral pulsating masses could be seen and felt, and a smaller pulsating mass could be palpated in the left popliteal fossa. Good posterior tibial and dorsalis pedis pulses were present bilaterally.

Radiographs of the abdomen showed a partially calcified mass, suggesting a rather large aneurysm in the region of the second and third lumbar vertebrae. Films of the chest showed tortuosity and some dilatation of the thoracic aorta, but no suggestion of actual aneurysm.

The hemoglobin content was 12.5 gm. per 100 cc. of blood, packed cell volume 39 per cent, nonprotein nitrogen 31 mg. per 100 cc. of serum, and blood volume 5,950 cc. Results of blood tests for syphilis were negative. The specific gravity of the urine was 1.016 and there were no casts or red blood cells.

The electrocardiogram was reported as an abnormal tracing interpreted as consistent with left ventricular hypertrophy.

At operation, with the arterial pressure, an electrocardiograph and an electroencephalograph continuously monitored, the abdomen was opened and a very large fusiform aneurysm of the terminal aorta was observed, beginning several centimeters distal

Submitted February 23, 1960.

to the renal arteries. Large aneurysms were also present involving both common iliac arteries, both external iliac arteries and both hypogastric arteries. There was a small aneurysm of the left profunda femoris. The aneurysms were relatively thin-walled and quite easily compressible. After dissection and clamping were completed, 500 cc. of blood was withdrawn from the largest aneurysm. This blood was later returned to the patient. The aortic, common iliac, external iliac and common femoral aneurysms and arteries were resected as one specimen. The hypogastric arteries and both profundas were ligated. A teflon bifurcation prosthesis was used to reestablish continuity.

The pathologist reported "atherosclerotic arteries with fusiform and saccular aneurysms."

The patient made an uneventful recovery and left the hospital ambulatory on the fourteenth postoperative day. When last examined, in February, 1960, he was symptom-free. He was comfortable walking and had returned to work.

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Removal of Left Ventricular Aneurysm With the Heart Exposed and Circulation Maintained by Heart-Lung Machine

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SOL BERNSTEIN, M.D., and
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In 1958 Bailey, Bolton, Nichols and Gilman[1] described the removal of left ventricular aneurysms following myocardial infarction. They advocated the closed technique method of excising aneurysms of this kind. The following case exemplifies the rapidity with which these aneurysms may enlarge, the symptoms of congestive failure, and surgery with the heart opened to expose the operative field.

The patient, a 47-year-old white man, was working under a trailer in Alaska on February 12, 1959, when he noticed the sudden onset of shortness of breath and severe pain in the chest, radiating to the elbows. Within 15 or 20 minutes he felt somewhat better and he rode in the truck for a distance of 35 miles. While riding, he gradually became worse, vomited, and perspired profusely. He was admitted to Providence Hospital in Anchorage, Alaska, where he remained for five weeks. He was informed there that an aneurysm of his heart had developed. In the first films taken in Alaska, this lesion was very small and hardly noticeable.

When the patient was first observed by the authors on June 17, 1959, there was no history of orthopnea, although he had noticed paroxysmal nocturnal dyspnea and shortness of breath on the least exertion. Upon physical examination the patient was observed to be well-developed and nourished. With the patient recumbent the blood pressure in the right arm was 100/50 mm. of mercury and in the right leg 170/130 mm. There were good carotid, brachial, ulnar, radial, femoral and posterior tibial pulsations bilaterally. The right radial pulse was stronger than the left. The dorsalis pedis pulse could not be felt on either side. The edge of the liver was not palpable. Upon cardiac auscultation a diffuse apical beat was heard at the left fifth intercostal space over an area of about six centimeters. No thrill was palpable. The pulmonic second sound was normal. No murmurs were heard.

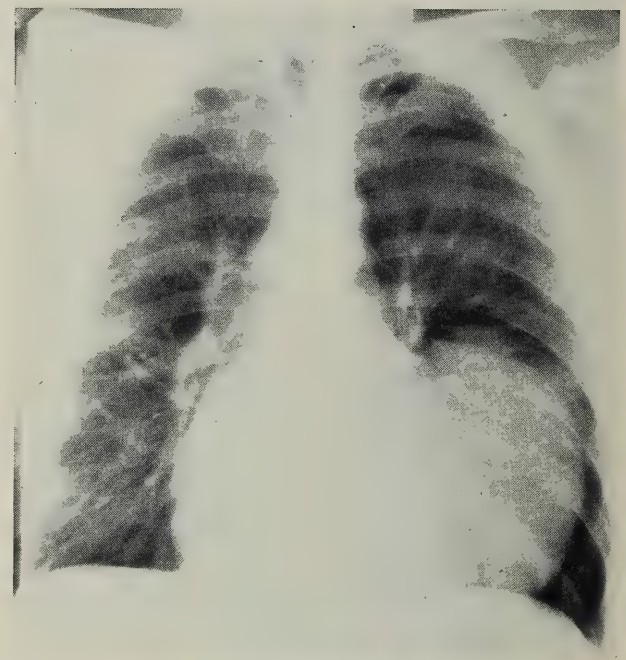


Figure 1.—Preoperative x-ray film showing large left ventricular aneurysm.

An x-ray film (Figure 1) taken June 20 showed an aneurysm involving the myocardium of the left heart border in the left ventricular region with some associated pleural thickening. This had increased to a pronounced degree since the small aneurysm was noted first on February 26, 1959.

An electrocardiogram on June 20, 1959, was interpreted as indicating extensive anterolateral myocardial infarction. The ST T wave changes suggested either a relatively recent process or a ventricular aneurysm. Because of the rapidity of the growth of this lesion, operation was done on the fourth day in the hospital and a left ventricular aneurysm was completely resected. Extracorporeal circulation through the heart-lung machine was maintained for 58 minutes, the heart being permitted to beat throughout. The aneurysm, about 12

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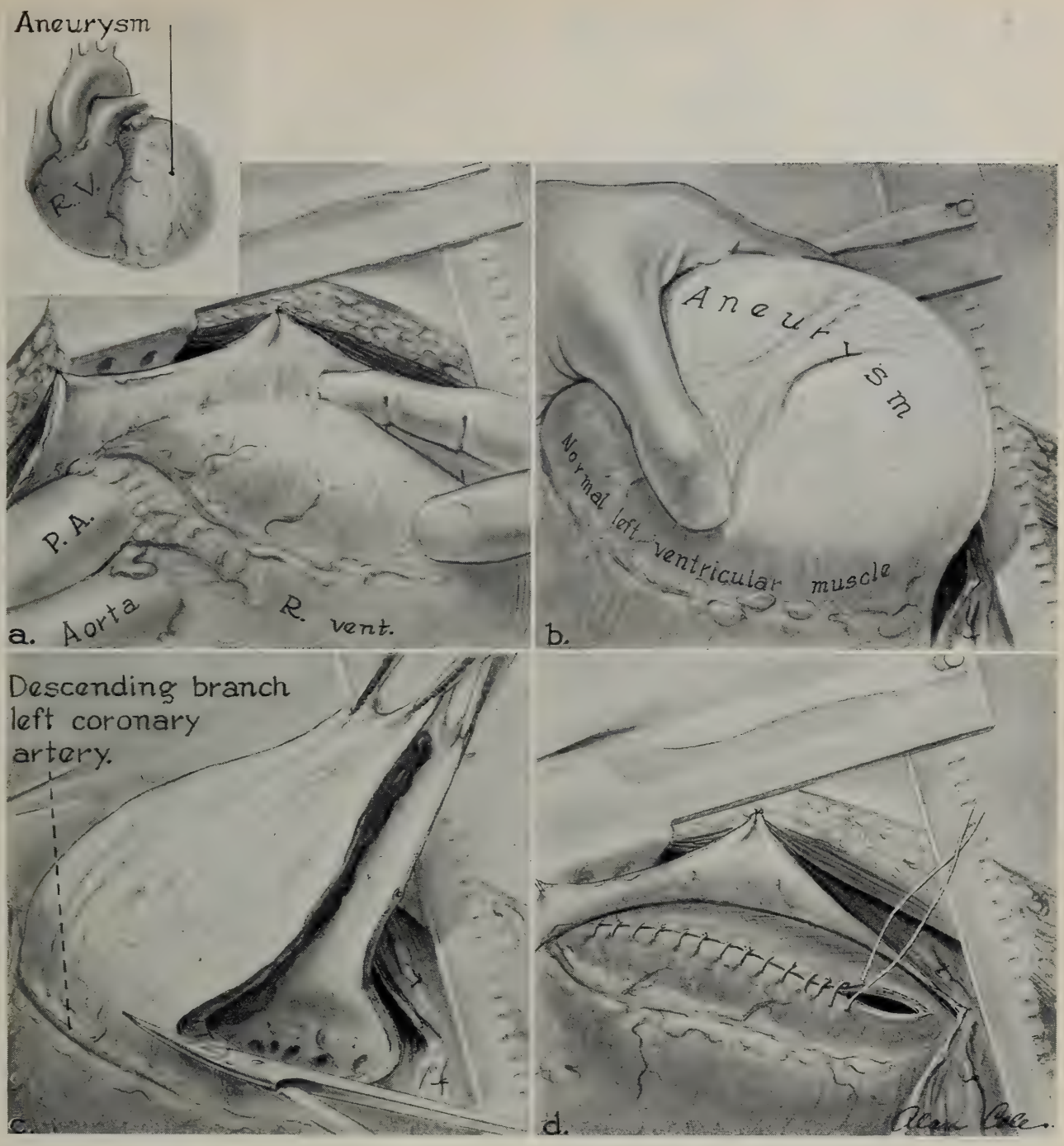


Figure 2.—Artist's conception of left ventricular aneurysm and its removal in present case.

cm. in diameter, extended within 1 centimeter of the circumflex artery and down to the apex of the heart. It also extended from within 2 centimeters of the descending branch of the left coronary artery over to the left. At its thinnest area the aneurysm was about 2 millimeters in diameter and at its base it was approximately 10 millimeters in diameter. The aneurysm was opened and many small clots were evacuated. These clots were thin and adherent to the wall of the aneurysm. The aneurysm was excised, leaving a 1 centimeter rim of good fibrous tissue around its base (Figure 2). The defect in the left ventricular muscle was closed in a longitudinal direction with multiple interrupted figure of eight sutures of No. 1 silk. Two continuous rows of No. 1 silk were then used to further support the suture line. The cardiopulmonary by-pass then was discontinued and the heart continued to beat well.

Postoperatively the patient did well. However, due to a great deal of pulmonary secretion, tracheotomy had to be done 48 hours after the resection of the aneurysm. The tube was kept in place for eight days to facilitate aspiration of the secretions. After it was removed, the patient continued to do well. X-ray examination (Figure 3) after the operation showed no evidence of the aneurysm. When last

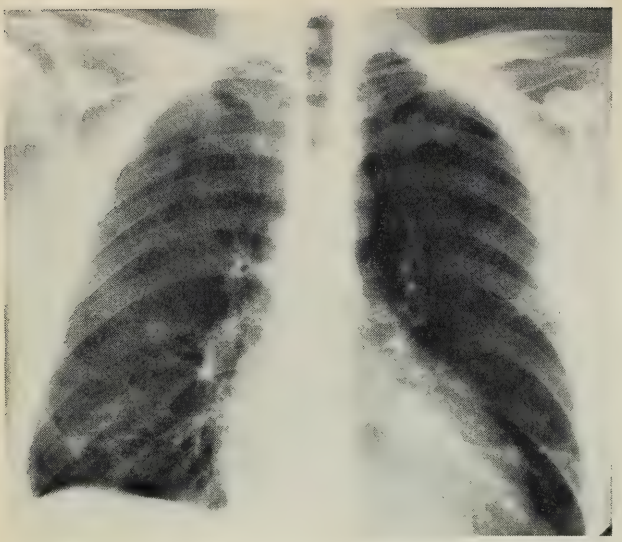


Figure 3.—Postoperative x-ray film showing normal appearance of the heart.

seen four months later the patient felt well. He volunteered that he was no longer short of breath, that he felt as well as he had before the attack in February, 1959, and was back at work.

DISCUSSION

A case of a rapidly developing and progressing left ventricular aneurysm during a four-month period after myocardial infarction is presented. The rapidity of growth of the aneurysm and the fact that the aneurysmal sac removed at operation was quite thin-walled, suggested that this patient would probably have died of rupture of the sac within a very short time. It is felt that all patients with left ventricular aneurysm following myocardial infarction should be operated upon if there is any evidence of heart failure or embolization. If neither of these findings is present, the patient should be observed closely with serial x-ray examination at least every three months, and if there is enlargement of the aneurysm, operation should be performed.

Excision of ventricular aneurysms with use of the heart-lung machine is believed to be better and safer than the closed technique. With the heart open, a more definitive procedure can be done and there is not the danger of embolization from the clot within the sac that there is with closed heart operations.

At last report the patient had returned to work.* He felt essentially the same as he did before the myocardial infarct. On physical examination a Grade II systolic murmur was heard to the left of the sternum at the third and fourth intercostal spaces.

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*May 23. The patient continues to work and do well.

Spontaneous Remission of Diabetes

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R. G. HAINING, M.D., Boston

PERSONS who recover from diabetic acidosis usually need insulin or dietary restriction or both for the rest of their lives. Sustained remission or recovery is extremely rare either in children or adults. "Once a diabetic always a diabetic" is almost axiomatic.

The woman whose history follows has remained aglycosuric and normoglycemic, without taking insulin and with no restriction in diet, for six years.

REPORT OF A CASE

A 62-year-old widow was admitted to the Glendale Sanitarium and Hospital on the evening of February 11, 1954. Her husband had died suddenly late in 1953. On January 10, 1954, the patient became ill with what she thought was influenza. Her principal complaints were low-grade fever, malaise, insomnia and poor appetite. On February 1, 1954, she was given Aureomycin capsules. On February 7 she noticed that her mouth felt dry "like cotton." Her tongue was coated, and she was mildly nauseated and vomited once. She had several brief episodes of epigastric-retrosternal distress which she described as "angina." She stated that in the month preceding admission she had lost 16 pounds. Her weight on February 11, 1954, was 110 pounds. There was no significant family history.

The temperature was 99° F., the pulse rate 80 and blood pressure 170/90 mm. of mercury. The lips were dry and cracked, the tongue coated and the superficial vessels in the pharynx moderately engorged. There was no physical evidence of disease of the heart or lungs, although an electrocardiogram was interpreted as showing "lateral myocardial ischemia and left ventricular hypertrophy." The optic fundi appeared normal for a person of the stated age. There were no abnormal abdominal or neurological findings.

On routine urinalysis there was a 4 plus reaction for sugar and 2 plus for acetone. The hemoglobin was 11.4 grams per 100 cc. of blood, and leukocytes numbered 11,300 per cu. mm., 83 per cent neutrophils. Fasting blood sugar on February 12, 1954, was 610 mg. per 100 cc. The carbon dioxide combining power was 41 volumes per 100 cc. Nonprotein nitrogen was 30 mg. per 100 cc. of blood. The serum acetone reaction was 2 plus.

During the next four hours 225 units of crystalline insulin and two liters of 0.85 per cent sodium chloride were administered intravenously. After four hours the blood sugar was 62 mg. per 100 cc.

Submitted March 3, 1960.

and the carbon dioxide combining power 54 volumes per 100 cc.

The diet prescribed was 145 grams carbohydrate, 55 grams protein and 80 grams fat (1,500 calories). Ten units of crystalline insulin were given one-half hour before meals, with an additional 5 units for every plus over 2 plus (Clinitest).

On February 19 the fasting blood sugar was 309 mg. per 100 cc., the carbon dioxide combining power 57 volumes per 100 cc. Serum cholesterol was 345 mg. per 100 cc., and cholesterol esterified was 245 mg. per 100 cc. Cephalin flocculation was 1 plus. Thymol turbidity was 1 Maclagen unit. Serum protein was 5.5 grams per 100 cc. with normal albumin-globulin ratio. Beginning February 19, 30 units of NPH insulin was given before breakfast, with crystalline insulin before meals in amounts governed, as previously, by the Clinitest reaction.

An x-ray film of the chest February 19 was reported as showing "radiographically normal heart, lungs and pleura." Radiological studies of the gallbladder, colon and upper gastrointestinal tract showed no abnormalities except a single ovoid gallstone, nonopaque, measuring 15 mm. in its greatest diameter.

From March 3 to March 9 there was no glycosuria. The fasting blood sugar March 9 was 73 mg. per 100 cc. The NPH insulin dosage was gradually reduced—to 25 units on March 4, 20 units on March 6 and 10 units on March 9. No crystalline insulin was given after March 1.

On March 12 insulin was discontinued. The fasting blood sugar March 15 was 110 mg. per 100 cc. The patient left the hospital March 18, with no prescription of drugs and with moderate dietary restrictions (1,500 calories—80 grams protein, 2:1 carbohydrate). She weighed 120 pounds.

Fasting blood sugar values as determined in the office March 23, April 6 and May 5, 1954, were 80, 105 and 66 mg. per 100 cc. respectively.

The patient was put in hospital again from October 9 to October 11, 1954, because of fever, cough and "chest distress." No abnormalities were noted on physical examination or in results of laboratory tests. On October 9 urinalysis showed no sugar or albumin, and the fasting blood sugar was 89 mg. per 100 cc. An x-ray film of the chest showed no change since February 18, 1954. The diagnosis was acute upper respiratory infection. The patient said that she "had not paid much attention to the diet."

The patient diligently tested her urine by Clinitest and at no time found evidence of glycosuria. Nevertheless, she continued to worry about a possible recurrence of diabetes. On December 7, 1954, the blood sugar two hours after a "loaded" breakfast was 76 mg. per 100 cc. On February 15, 1955, the fasting blood sugar was 72 mg. per 100 cc., the nonprotein nitrogen 30 mg. per 100 cc., and the results of urinalysis within normal limits.

On January 23, 1956, the patient was admitted to the hospital with complaints of exhausting cough, chills, fever (102° F.) and pain in the right chest. Examination disclosed inspiratory rales and wheezing breath sounds in the right lower lung posteriorly. An x-ray film of the chest showed a small pneumonic infiltration in the right middle lobe. Urinalysis January 24 was within normal limits and fasting blood sugar was 92 mg. per 100 cc. The patient chose her own diet. She was dismissed February 7 with no medication and no dietary recommendations.

On May 17, 1957, the fasting blood sugar was 76 mg. per 100 cc. Results of urinalysis and blood cell count were within normal limits.

On July 27, 1958, the patient was admitted to hospital because of complaints of persistent pain in the left upper abdominal quadrant and in the left costovertebral area. An excretory urogram was reported as showing good bilateral kidney function, no abnormality of the kidney or ureteral outline, but a moderate cystocele. A barium enema study was carried out and no lesion was noted in the colon.

During this hospital stay the patient was encouraged to eat as she pleased. Since she had been doing this for two and a half years, it may be more correct to say that she continued to eat "what came naturally." A strict vegetarian, the patient presumably had a diet, in and out of the hospital, with a high carbohydrate content. On July 28 the results of urinalysis were within normal limits and fasting blood sugar was 97 mg. per 100 cc. The patient left the hospital July 30, 1958, asserting that she felt "better than I have in years." Her weight was 118 pounds.

From March, 1958, to the time of this report, the only drug she received was chlorothiazide (Diuril®) 250 mg., one tablet twice daily. Blood pressure as determined in the office from time to time, ranged from 120/80 to 160/90 mm. of mercury. There was no recurrence of the "anginal" symptoms. The serum cholesterol on September 26, 1958, was 256 mg. per 100 cc. Electrocardiograms continued to show left ventricular strain pattern but it was less pronounced than in 1954.

In December, 1959, the patient was admitted to hospital for influenza with low-grade fever. A glucose tolerance test at that time showed 93 mg. of glucose per 100 cc. of serum while fasting, 116 mg. per 100 cc. 30 minutes after ingesting 100 gm. of glucose and 170.6 mg. per 100 cc. after 60 minutes. There was no glycosuria. The blood urea nitrogen and albumin-globulin ratio were normal. Results of a liver "profile" (including serum bilirubin, serum alkaline phosphatase, thymol turbidity and

cephalin flocculation) were within normal limits. The protein-bound iodine was 4.4 micrograms per 100 cc.

The patient was again in hospital on January 4, 1960, with fever (102° F.), cough, chills, and girdle-type pain in the lower left thorax. Inspiratory rales were heard over the lower left lung posteriorly, and an x-ray film of the chest showed a small pneumonic infiltrate above the left diaphragm. Within a few days the typical eruption of herpes zoster appeared. No abnormalities were noted on examination of the blood and urine. The results of an Exton-Rose glucose tolerance test were essentially the same as those of December, 1959.

On February 7, 1960, the blood sugar two hours after breakfast was 107 mg. per 100 cc. An x-ray film showed almost complete resolution of the infiltrate in the left lung. No dietary restrictions had been ordered and the patient gained 10 pounds in weight during the month in the hospital. She requested a low-calorie diet because she "feels best" when her weight is 115 to 120 pounds.

DISCUSSION

That remissions can occur in insulin-deficient diabetes, usually by diet restriction and administration of insulin, is indisputable. Harwood,[3] in his recent review, expressed belief that the evidence also provides a convincing explanation of how they occur. He noted: Hyperglycemia, however produced, may stimulate the beta cells of the pancreatic islets to the point of exhaustion. The pancreas responds by hypertrophy of the islets and by formation of new islets from the acinar ducts. If the stimulus is too overwhelming or too prolonged, the islets will be irreversibly destroyed. However, if the stimulus is removed, and/or the hyperglycemia relieved, the production and normal tolerance for glucose are restored. In rare instances the stimulus is removed surgically by excision of diabetogenic tumors of the adrenal or thyroid glands. More commonly it is removed by administration of insulin and reduction of food intake.

In 1953 Cheng, Jahraus and Traut[1] reported the case of a woman, 68 years of age, who, after an episode of coma, extreme hyperglycemia and profound ketosis, apparently made a spontaneous and complete recovery. Five weeks after the episode of coma and ketosis, insulin was discontinued. However, two years and eight months after her first hospital stay she relapsed into a mild, chronic diabetic state. In a follow-up history of this patient, Traut[5] made brief mention of Harwood's "less dramatic report." He proposed no hypothesis of his own as to the modus operandi of spontaneous remissions from diabetes. He did not question the validity of the data on which Harwood bases his "explanation." He expressed belief that an "adequate explanation" of this phenomenon is not at present available, and apparently dismissed Harwood's theory on the rather vague grounds that "assumption of a primary disturbance in the islet physiology would be oversimplification."

Disturbance in the islet cell physiology must surely be involved. Traut[5] may be correct in stating that to assume a "primary" disturbance would be to oversimplify. But did Harwood[3] postulate a "primary" disturbance in islet cell physiology? To us it seems he did not. In Harwood's view the "primary" factor is in ". . . certain circumstances that produce hyperglycemia . . ."

Sometimes the "circumstances" seem obvious. Diabetogenic tumors disturb islet cell physiology, but the "primary" factor is the tumor, not what the tumor does to the islet cells. In Newburgh's[4] cases the primary factor was probably overeating and obesity. In the case reported by del Greco and Scapellato[2] the primary factors were probably infection plus overconsumption of carbohydrates: A 62-year-old man, recovering from pneumonia and a penicillin reaction, consumed 2 kg. of cane sugar and 3 kg. of honey within two days. Severe diabetes with acidosis quickly developed, although after treatment with insulin a remission occurred and continued for at least two years.

In the case reported by Harwood[3] no "primary factors" are discernible.

In the case herein reported the only "primary factors" admissible seem to be infection and emotional stress. Subsequent to the diabetic-acidotic episode the patient had several episodes of infection, five deserving hospitalization, with no detectable diabetogenic effect. The results of glucose tolerance tests in 1959 and 1960 indicate that she is a potential or "latent" diabetic. Nevertheless, in a period of six years, in spite of several serious infections, she had no clinical signs or symptoms of diabetes and required no treatment.

Might emotional stress serve as a "primary factor"? No definitive answer can be given. There are scattered references in the literature on the role of emotional upsets in producing hyperglycemia, but the evidence is fragmentary and inconclusive. In the case reported here, nothing more can be asserted than that emotional strain (following the sudden death of the husband) may have been one of the precipitating causes.

If Harwood's[3] "explanation" is correct or partially correct, why is not the remission phenomenon more commonly encountered? Harwood replies that (1) the beta cell apparatus in such persons is inherently weak and a certain amount of irreversible damage has occurred before hyperglycemia, glyco-

suria, etc., are detected. (2) Patients are notoriously unwilling or unable to submit to the rigors of a restricted diet. (3) Physicians and patients both fear provocation of attacks of hypoglycemia. Thus the majority of patients with severe diabetes are systematically undertreated. They are kept in a state of chronic mild diabetes, and this makes remission or amelioration impossible.

There may be another reason more difficult of proof. The "once a diabetic always a diabetic" attitude may have so greatly reduced awareness of the possibility of remission or recovery that physicians do not expect it, rarely attempt to induce it, and may not record it when it occurs.

Whether Harwood's explanation of the remission phenomenon is correct or not, his review makes the prognosis of diabetes less fatalistic. Diabetic patients, particularly "new diabetics," should be treated vigorously and hopefully. The possibility of remission should always be borne in mind.

SUMMARY

A 62-year-old woman was put in hospital in February, 1954, with hyperglycemia and mild acidosis. She was given insulin and intravenous fluids and a restricted diet was prescribed. Within four hours the laboratory signs of diabetic acidosis were reversed. Insulin dosage was gradually reduced and in four weeks was discontinued. She adhered to a mildly restricted diet till October, 1954. Since then she has not modified her food intake in any way except to reduce consumption of cholesterol-rich foods. Glucose tolerance tests indicate that she is still a latent diabetic. Nevertheless, in the past six years a number of severe infections, some requiring admittance to hospital, have not provoked signs or symptoms of diabetes.

540 North Central Avenue, Glendale 3 (R. B. Haining).

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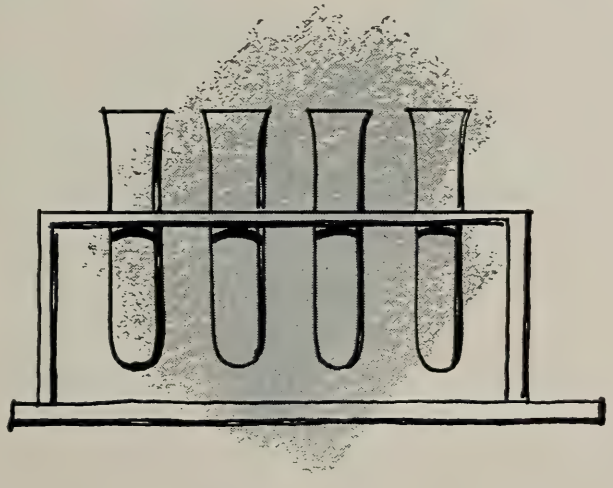
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For information on preparation of manuscript, see advertising page 2

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EDITORIAL

Health Services for the Elderly

THE NATION'S NEWSPAPERS have devoted innumerable columns in the past few months to the discussions and hearings in Congress on a welter of proposals for providing health services to people 65 years of age or older.

Mr. Forand of Rhode Island started it off a couple of years ago with his famous bill, backed by labor, to supply hospital, nursing home and surgical services to Social Security recipients. After a series of public hearings and thousands of pages of testimony, the Forand Bill came to a vote in the House Ways and Means Committee, where a 17-to-8 vote defeated it.

Critics of the Forand measure, however, picked primarily on its details and in many instances overlooked the philosophy behind it. To the medical profession, the philosophy underlying a proposal of this sort is more important than whether the bill provides 60 or 90 days of hospitalization, whether it provides medical as well as surgical services, or whether or not there is a requirement that the patient be responsible for some of the cost.

Basically, the question comes down to the simple problem of whether the Social Security System is to continue as a system of cash payments to eligible persons, or is to enter the field of providing services. If it is to encompass services, will not the provider —the government—soon begin to say not only what is to be provided but how it is to be done? To have a government bureau deciding how or how much a physician will treat a patient is unthinkable!

The medical profession has been alert to this possibility. Unfortunately, the profession has been so busy defending itself against the villification of labor and other supporters of Forand-type proposals that it has had little opportunity to alert other major sections of our economy to resist this trend toward an ever-larger government and an ever-smaller citizen.

A position of defense in legislation is not comfortable. The proponent of a proposition which you know instinctively is wrong, turns to you and says: "You say my proposal is wrong. All right, you come up with something better." Politically, this is excellent strategy; philosophically, it overlooks the obvious truth that one need not know the right answer to a problem in order to recognize the wrong one.

The medical profession, challenged to "come up with something better," has been striving to evolve a positive program which would, at one time, provide health care for the needy elderly and yet not open the way to what could become a system under which medical decisions with regard to treatment of patients are made by persons other than the physicians who are carrying out the treatment.

Out of this search has come an eight-point program which the American Medical Association has adopted and publicized. It depicts the need for aiding the elderly whose financial resources are strained, for fostering additional facilities in nursing homes, for expanding voluntary insurance and for providing homemakers' services. The A.M.A. statement also touches on the undesirability of considering age 65 as a mandatory retirement age, on the need of stressing health education among the elderly and on the ravaging effects of inflation for those with fixed incomes.

Even before the A.M.A. had issued its eight-point program the Council of the California Medical Association had approved a statement of position and had sent representatives to Chicago to discuss it with A.M.A. leaders. The C.M.A. statement strikes more at the fundamentals of the problem than at details. It is intended to serve as a framework upon which a program can be constructed.

In brief, the C.M.A. statement makes these points:

The profession urges all citizens to provide for their health care needs during their productive periods and later, using insurance mechanisms.

There are many variations by locale in resources and needs and these should be taken into consideration instead of imposing nationwide standards on all areas.

Where community and individual resources are inadequate, government may be required to provide assistance; where this is done, grants-in-aid to the states should be utilized for local administration.

If federal funds are needed to assist those who cannot provide for themselves, such funds should come from general funds and not be made a part of the OASI program of Social Security. This program is not based on need, it excludes many people who are needy and it makes no allowance for community or personal resources.

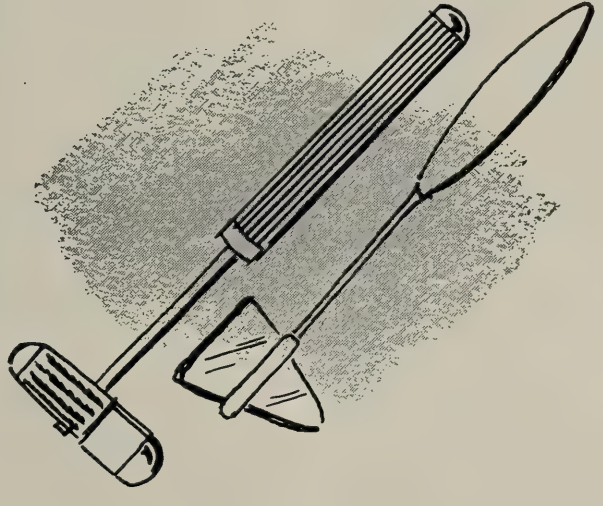
If government funds are used, they should be used to purchase insurance which would cover home, office and in-hospital medical and surgical services, hospital care and catastrophic coverage, this last point to be emphasized.

Included in the C.M.A. statement is a brief item which many politicians have overlooked so far. This item: "Where an individual is able to provide for his own medical care . . . government has no role." This should be called to the attention of all proponents of governmental give-away plans, if for no other reason than to inject a little reality into the discussion of a social problem.

As of this date Congress has rejected the Forand Bill, HR 4700. It has turned down a proposal advanced by the Secretary of Health, Education and Welfare. It has received a number of additional proposals aimed at giving some coverage for health care needs to the elderly. Some of these are so new that there has not been time to hold hearings on them.

From the welter of legislation offered, and from the hesitancy of many members of Congress to act on piecemeal legislation until after the President's Conference on Health Care for the Aged, scheduled for January, there seems to be emerging in Washington a classic legislative deadlock. With national elections only a few months away, neither political party wants to support a proposal made by the other.

While deadlocks may hamper progress, they may also give time for sane thinking and analysis. In this instance it is to be hoped that the aggregate thinking may include the findings of the President's Conference. With a sound approach to the real problem involved, we may hope to develop a program designed to supply help where it is needed and to prevent the destruction of our philosophical ideals in the name of political expediency.



California MEDICAL ASSOCIATION

NOTICES & REPORTS

Council Meeting Minutes

Minutes of the 459th Meeting of the Council, Statler-Hilton Hotel, Los Angeles, April 23-24, 1960.

The meeting was called to order by Chairman Sherman in the Golden State Room of the Statler-Hilton Hotel, Los Angeles, on Saturday, April 23, 1960, at 9:30 a.m.

Roll Call:

Present were President Foster, President-Elect Bostick, Speaker Doyle, Vice-Speaker Heron and Councilors MacLaggan, Wheeler, Todd, Quinn, O'Neill, Kirchner, O'Connor, Shaw, Rogers, Gifford, Murray, Davis, Miller, Sherman, Campbell, Morrison and Teall. Absent for cause Secretary Hosmer, Editor Wilbur, Councilor Anderson.

A quorum present and acting.

Present by invitation were Messrs. Hunton, Thomas, Clancy, Collins, Marvin, Whelan and Dr. Batchelder of CMA staff; Messrs. Hassard and Huber of legal counsel; Messrs. Read, Salisbury and Fraser of the Public Health League; county executives Field of Los Angeles, Bannister of Orange, Brayer of Riverside, Dochterman of Sacramento, Nute of San Diego, Neick of San Francisco, Thompson of San Joaquin, Wood of San Mateo, Donovan of Santa Clara, Funk of Solano, Dermott of Sonoma, Bailey of Tulare and Blankfort of Marin; Doctor Malcolm Merrill, State Director of Public Health; Doctor John Keye of the State Department of Social Welfare; Doctor Edward Rudin of the State Department of Mental Hygiene; Robert Richards of the American Society of Internal Medicine; Messrs. Paolini and Lyon of California Physicians' Service; Doctors Donald Harrington, Werner F. Hoyt, Dan O. Kilroy, Clark Abbott, George Herzog, Wayne Pollock, William Kaiser, Douglas Donath; Doctor E. Vincent Askey, president-elect of the American Medical Association, and others.

HEARINGS ON C.M.A. CONTINUING EDUCATION AND SCIENTIFIC ACTIVITIES

The C.M.A. Committee on Continuing Education and Scientific Activities will hold two open hearings within the next two months. One is scheduled for 9:30 a.m., June 19, at the Hilton Inn, International Airport, San Francisco. The other will be held July 10 beginning at 9:30 a.m., at the Hyatt House, 5547 Century Boulevard, Los Angeles.

Any C.M.A. member wishing to appear at either meeting is invited to do so.

1. *Minutes for Approval:*

On motion duly made and seconded, minutes of the 458th Council meeting, held March 26, 1960, were approved.

2. *Membership:*

(a) A report of membership as of April 20, 1960, was presented and ordered filed.

(b) On motion duly made and seconded, 304 delinquent members whose dues had been received since April 1, 1960, were voted reinstatement to membership.

(c) On motion duly made and seconded, in each

PAUL D. FOSTER, M.D. President
WARREN L. BOSTICK, M.D. President-Elect
JAMES C. DOYLE, M.D. Speaker
IVAN C. HERON, M.D. Vice-Speaker
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instance, 37 applicants were elected to Associate Membership. These were:

Donald Ash, Hubert Chan, Robert Ju Wen Chang, Thomas John Mudge, Kathryn Williams, Alameda-Contra Costa County; Harry N. Hook, Harriet B. Randall, Robert A. Sills, Harry G. Smith, Eugene Thomas, Clara E. Vanbery, Roy L. Walford, Jr., Los Angeles County; Werner A. Einfalt, Robert Marsh Patterson, Napa County; George F. Warner, Orange County; Karl Murphy, Riverside County; Chauncey Baird, Doris E. Berger, Carrol S. Small, San Bernardino County; Wayne Irving Newton, San Diego County; Edward G. Biglieri, Phillis Bourne, Hope Corey, Francis J. Curry, Otto Guttentag, Joseph Jacobs, Steven E. Ross, San Francisco County; James E. Yates, San Joaquin County; Alvin Joe Scull, Santa Barbara County; Cecil R. Gavel, Charles A. Neff, Elmo R. Zumwalt, Tulare County; Jack C. Borel, Pei Chu Chao, William Kern, William R. Rich, Charles E. Spellman, Ventura County.

(d) On motion duly made and seconded in each instance, 16 members were voted Retired Membership. These were:

Ralph W. Bigger, Allen Morrow, William A. Perkins, Alameda-Contra Costa County; H. Robert Dykes, Sr., William L. Griffin, Arthur Wm. Hewitt, DeWard W. Jones, Charles Duane Miller, Niels Nedergaard, William Alfred Pettit, Jules C. Welch, Walter Williams, Los Angeles County; Masa Atsu Harada, Sacramento County; Leroy C. Abbott, Adolph Berg, Fred H. Zumwalt, San Francisco County.

(e) On motion duly made and seconded in each instance, 14 members were voted a reduction of dues because of prolonged illness or postgraduate study.

3. *State Department of Public Health:*

Doctor Malcolm Merrill, State Director of Public Health, reported that studies were being made on the extent of the use of x-rays and other sources of radiation. He also reported that the use of poliomyelitis vaccine in March was at about the same level as a year earlier.

On motion duly made and seconded, at Doctor Merrill's request, the chairman was authorized to name a Councilor as a consultant to the Department's study of subsidies to local health departments to be made at the request of state authorities. Doctor Sherman named Doctor John G. Morrison as the consultant.

It was agreed to refer to the Commission on Public Agencies the matter of consultation and cooperation with the Board in promoting greater usage of poliomyelitis vaccine.

Doctor Merrill also reported that the Board of Health has adopted a resolution urging communities to adjust the fluoride content of their water supplies to levels advocated for maximum protection against dental caries.

4. *State Department of Mental Hygiene:*

Doctor Edward Rudin of the State Department of Mental Hygiene reported that the department was looking into the establishment, as a pilot study, of a day-hospital for the treatment of mental illness. He also announced a conference of directors of Short-Doyle facilities to be held on May 24-25, to which all physicians are invited.

5. *California Physicians' Service:*

Doctor John G. Morrison gave a progress report on California Physicians' Service. No action required.

6. *Commission on Medical Services:*

Chairman Donald Harrington of the Commission on Medical Services reported on several topics, including:

Referral to the Bureau of Research and Planning the proposal made at the March 26 Council meeting for investigation into the philosophy and principles to be followed in considering the role played by government in medical care programs. On motion duly made and seconded, this referral was approved.

Creation of a subcommittee to study the Social Security program. Approved by the Council.

Stimulation of the usual fee concept in the county medical societies and establishment of public service committees where they do not exist or are not functioning effectively. Approved by the Council.

Strengthening of the liaison with insurance carriers, to work for more effective coverage under indemnity programs.

Doctor Harrington reported that 13 counties are now federated to provide coverage through foundations for federal employees. California Physicians' Service will handle the underwriting aspects of this coverage, as subcontractor.

Doctor Harrington also gave a report on a conference held in New York under labor auspices on the subject of rising medical care costs.

Mr. Whelan reported on a regional meeting of the A.M.A. Committee on Medical Care held in Reno, Nevada, April 1 and 2, on the subject of welfare medical care programs. Doctor S. R. Sherman represented the C.M.A. at this meeting.

Councilor Quinn reported on the Medical Advisory Committee to the State Department of Social Welfare, to which Doctor Sherman has been elected Chairman, and on a medical care study being done on 300 patients. Doctor Quinn also reported on a

Washington meeting on the subject of the control of dangerous drugs.

7. *Report of the President:*

President Foster reported on progress at meetings of the Governor's Committee on Medical Aid and Health and stated that staff assistance would be needed to evaluate some of the material produced by this committee. On motion duly made and seconded, it was voted to authorize the Executive Director and staff to assist in this matter and to secure the services of C.P.S. staff members and actuarial consultants, the necessary cost to be provided after approval of costs by the Finance Committee.

Doctor Foster also reported on a meeting held with representatives of the Self-Insurers Association and suggested that a liaison committee to this group be established. The proposal was referred to the Committee on Committees.

With regard to the Student American Medical Association, which will hold its annual meeting in Los Angeles in May, it was regularly moved, seconded and voted to share with the Los Angeles County Medical Association a cost of $350 for hospitality.

Doctor Foster also reported that a national conference on prepaid medical care would be held in Chicago on May 13-14 and urged that the Association have several representatives present. On motion duly made and seconded, it was voted to authorize Doctor Donald Harrington to attend this meeting and to select one or two additional representatives.

8. *Report of President-Elect:*

President-Elect Bostick reported on visits he had made to county medical societies and suggested that these visits be organized on lines to make them more effective. On motion duly made and seconded, it was voted to authorize the Executive Director and staff to prepare recommendations to secure the maximum benefit from officers' visits to the counties.

On motion duly made and seconded, it was voted to request the Commission on Medical Services to review the conditions prevalent in public welfare medical care programs to assure the administration of these programs in the most effective manner.

9. *Committee on Committees:*

Doctor Bostick reported for the Committee on Committees, presenting nominations for various commission and committee appointments, which, on motion duly made and seconded, were approved by the Council. These appointments are listed on an appended sheet as a part of these minutes.

10. *Commission on Professional Welfare:*

Doctor Homer Pheasant, chairman of the Committee on Health & Accident Insurance, reported that the committee had approved proposals made by underwriters of the present disability insurance program, under which participants could secure, on an underwriting basis, double the present schedule of benefits and participants who continued practicing after reaching the age of 70 years could continue their participation on the basis of one-half the stated disability benefits for two-year illness disability instead of three years. The underwriter also agreed to provide a 25 per cent maximum retention agreement. On motion duly made and seconded, it was voted to approve this program.

11. *Commission on Public Agencies:*

Doctor Bostick reported on a meeting with representatives of the California Pharmaceutical Association, at which the pharmacists had requested support of their disapproval of the furnishing of prescription blanks to physicians by pharmacies which imprinted their own names on the blanks. On motion duly made and seconded, it was voted to reaffirm the Association's disapproval of this procedure.

On motion duly made and seconded, it was voted to refer to the Committee on Scientific Work a proposal made by the pharmacists for inclusion of a pharmaceutical speaker on the programs of the Annual Session.

12. *Commission on Community Health Services:*

Doctor MacLaggan reported that a meeting called for a discussion of the problem of medical care for Mexican agricultural workers had not been held because of poor response to invitations and that the problem appeared to be centered mainly in Imperial County at this time. On motion duly made and seconded it was voted to request the commission to concentrate its efforts on this matter to that county.

13. *Committee on Legislation:*

Discussion was held on pending legislative proposals for the provision of medical services to the aged population. On motion duly made and seconded, it was voted to forward to the American Medical Association the content of Resolution No. 59 from the C.M.A. 1960 House of Delegates, for consideration as a basis of policy formation by the A.M.A. and to express to the A.M.A. the consensus of the Council that the A.M.A. sponsor positive legislation to meet the medical care needs of the older age group.

Recess:

At this point, 6:15 p.m., the Council was declared to be in recess until Sunday, April 24, 1960, at 9:30 a.m.

Reconvention:

The Council was reconvened in the Boston Room of the Statler-Hilton Hotel on Sunday, April 24, 1960, at 9:30 a.m.

A quorum present and acting.

A statement prepared by an ad hoc committee was presented and discussed. On motion duly made and seconded, it was voted to approve this statement and to empower the Council Chairman to appoint members of the Council to present it to the Board of Trustees of the American Medical Association, with instructions to determine what action, if any, the A.M.A. proposed to take on it.

Adjournment:

There being no further business to come before it, the meeting was adjourned at 12:00 noon.

SAMUEL R. SHERMAN, M.D., *Chairman*
MATTHEW N. HOSMER, M.D., *Secretary*

' ' '

COMMISSION AND COMMITTEE APPOINTMENTS

April 23, 1960

Commission on Medical Services:

Liaison Committee to Department of Health, Education and Welfare. It was voted to appoint Malcolm Todd, M.D., of Long Beach as chairman of the committee and to appoint the balance of the committee at a later date.

Liaison Committee to C.P.S. It was voted to recommend that the C.M.A. representatives be as follows: Clarence Albaugh, M.D., Los Angeles; George Wever, M.D., Stockton; Donald Campbell, M.D., San Francisco (Council); Robert McNeil, M.D., Los Angeles. The C.P.S. representatives are as follows: Paul Hoagland, M.D., Pasadena; Edward Liston, M.D., Santa Clara.

Liaison Committee with California Self-Insurers Association. It was voted to appoint the following for one-year terms: Elmer Gooel, M.D., Beverly Hills; Albert G. Miller, M.D., San Mateo (Council); Milo Youel, M.D., San Diego.

Bureau of Research and Planning:

It was voted to appoint T. Eric Reynolds, M.D., of Oakland, to fill the unexpired term of Francis E. West (resigned), and to appoint John M. Rumsey, M.D., of San Diego, to fill the unexpired term of John B. deC. M. Saunders, M.D.

It was voted to appoint Werner Hoyt, chairman, and Gerald Shaw, secretary.

Liaison Committee to State Bar Association:

It was voted to appoint the following for one-year terms: Francis E. West, M.D., Chairman, San Diego; J. Norman O'Neill, M.D., Los Angeles; Rees B. Rees, M.D., San Francisco; Cyril J. Attwood, M.D., Oakland; Donald A. Charnock, M.D., Los Angeles.

Committee on Radio, Television and Motion Pictures, Public Relations Committee:

It was voted to appoint the following to the Committee on Radio, TV and Motion Pictures: Paul D. Foster, M.D., Los Angeles; Eugene Hoffman, M.D., Los Angeles; Chester Herrod, M.D., San Francisco; John Schaupp, M.D., San Francisco, Chairman; Edward Bloomquist, M.D., Los Angeles.

It was voted to appoint Werner Hoyt, M.D., in his capacity as chairman of the Bureau of Research and Planning, as an ex-officio member of the Public Relations Committee.

Committee on Blood Banks:

It was voted to appoint Ted Kimball, M.D., of Eureka to fill the unexpired term of George Watson, deceased.

Committee on Allied Health Agencies:

It was voted to appoint Robert H. Butler, Santa Rosa, to fill the unexpired term of Fred Butler, M.D., Sonoma (retired).

Committee on Veterans Affairs:

It was voted to appoint Milo Youel, M.D., of San Diego to the Committee on Veterans Affairs. (Addition to the committee.)

Committee on Health and Accident Insurance:

It was voted to appoint George K. Herzog, M.D., of San Francisco to fill the unexpired term of Ivan C. Heron, M.D. (resigned).

Committee on Maternal and Child Care:

It was voted to appoint L. N. R. Leonards, M.D., of San Francisco to fill the unexpired term of H. E. Thelander, M.D. (resigned).

Commission on Cancer:

It was voted to appoint James Doyle, M.D., of Los Angeles to fill the unexpired term of Robert Scarborough (resigned); and to appoint Burt L. Davis, M.D., as chairman of the commission.

Committee on New and Unproved Methods of Cancer Treatment:

It was voted to appoint James Doyle, M.D., of Los Angeles to fill the unexpired term of Robert Scarborough (resigned) on the committee and as chairman.

Committee on School Health:

It was voted to appoint Gerald G. Jampolsky,

M.D., of Marin County as a member of the committee (addition to the committee).

Commission on Public Agencies:

It was voted to appoint Omer Wheeler, M.D., of Riverside to fill the unexpired term of Warren Bostick, M.D. (resigned), and appoint Doctor Wheeler as chairman.

Committee on State Medical Services:

It was voted to appoint Omer Wheeler, M.D., of Riverside as chairman of the committee, with Doctor Bostick remaining on the committee as a member.

Advisory Committee to Medical Assistants Association:

It was voted to appoint the following to the Advisory Committee: Steward Smith, M.D., San Diego; Byron Gifford, M.D., Santa Barbara; Leon Desimone, M.D., Los Angeles.

Committee on Committees:

It was voted to appoint the following to fill one-year unexpired terms of Doctors Davis and Wheeler (ineligible by virtue of being appointed chairman of commissions): J. Norman O'Neill, M.D., Los Angeles; Albert G. Miller, M.D., San Mateo.

In Memoriam

Beck, Gerald Henderson. Died in Glendale, April 4, 1960, aged 66. Graduate of University of Nebraska College of Medicine, Omaha, 1921. Licensed in California in 1923. Doctor Beck was a member of the Los Angeles County Medical Association.

✠

Crane, Jay Freeman. Died in Los Angeles, April 20, 1960, aged 43, of coronary heart disease. Graduate of University of Southern California School of Medicine, Los Angeles, 1942. Licensed in California in 1942. Doctor Crane was a member of the Los Angeles County Medical Association.

✠

Frederich, William J. Died in Los Angeles, December 24, 1959, aged 63. Graduate of Rush Medical College, Chicago, Illinois, 1928. Licensed in California in 1932. Doctor Frederich was a member of the Los Angeles County Medical Association.

✠

Getze, George Wilbur. Died in Long Beach, April 6, 1960, aged 76, of bronchopneumonia. Graduate of Hahnemann Medical College and Hospital of Philadelphia, Pennsylvania, 1906. Licensed in California in 1926. Doctor Getze was a retired member of the San Diego County Medical Society and the California Medical Association, and an associate member of the American Medical Association.

✠

Hambleton, Holland George. Died in Los Angeles, May 3, 1960, aged 68. Graduate of Bowdoin Medical School, Brunswick-Portland, Maine, 1915. Licensed in California in 1922. Doctor Hambleton was a retired member of the Los Angeles County Medical Association and the California Medical Association, and an associate member of the American Medical Association.

✠

Kelso, Raymond W., Sr. Died April 19, 1960, aged 63. Graduate of University of Illinois College of Medicine, Chicago, 1927. Licensed in California in 1927. Doctor Kelso was a member of the Los Angeles County Medical Association.

✠

Kohn, Jacob (Jack) A. Died in Camarillo, March 30, 1960, aged 69, of heart disease. Graduate of Chicago College of Medicine and Surgery, Illinois, 1915. Licensed in California in 1955. Doctor Kohn was an associate member of the Ventura County Medical Society.

Lang, Maurice Daniel. Died in Long Beach, January 31, 1960, aged 50, of pulmonary edema. Graduate of Louisiana State University School of Medicine, New Orleans, 1936. Licensed in California in 1944. Doctor Lang was a member of the Los Angeles County Medical Association.

✠

Laue, Richard John. Died in Van Nuys, January 13, 1960, aged 39, of coronary thrombosis. Graduate of University of Southern California School of Medicine, Los Angeles, 1945. Licensed in California in 1945. Doctor Laue was a member of the Los Angeles County Medical Association.

✠

McAtee, John Stephen. Died April 10, 1960, aged 71. Graduate of Creighton University School of Medicine, Omaha, Nebraska, 1910. Licensed in California in 1924. Doctor McAtee was a member of the Orange County Medical Association.

✠

Mesirow, Maurice Elias. Died in San Francisco, January 29, 1960, aged 73. Graduate of University of Illinois College of Medicine, Chicago, 1907. Licensed in California in 1919. Doctor Mesirow was a retired member of the Santa Barbara County Medical Society and the California Medical Association, and an associate member of the American Medical Association.

✠

Rood, Morris. Died in Northridge, April 22, 1960, aged 52. Graduate of Georgetown University School of Medicine, Washington, D. C., 1931. Licensed in California in 1948. Doctor Rood was a member of the Los Angeles County Medical Association.

✠

Wilson, Edward W. Died in Oakland, April 15, 1960, aged 50. Graduate of Stanford University School of Medicine, Stanford-San Francisco, 1935. Licensed in California in 1936. Doctor Wilson was a member of the Alameda-Contra Costa Medical Association.

✠

Woolsey, Chester Howard. Died in Woodside, April 21, 1960, aged 89. Graduate of University of California School of Medicine, Berkeley-San Francisco, 1901. Licensed in California in 1901. Doctor Woolsey was a retired member of the San Francisco Medical Society and the California Medical Association, and an associate member of the American Medical Association.

10th ANNIVERSARY

POSTGRADUATE INSTITUTE

SACRAMENTO VALLEY COUNTIES

Presented cooperatively by California Medical Association Committee on Postgraduate Activities, Sacramento Valley County Medical Societies and University of California School of Medicine, Los Angeles.

Tahoe Tavern, Lake Tahoe

July 1 and 2, 1960

PROGRAM

FRIDAY MORNING, JULY 1

Pediatrics

The Physician's Role in School Failure

9:30—**Three Orientation Lectures:**

Physical Problems Interfering with School Achievement—John M. Adams, M.D.

Emotional Disturbances in the Learning Process—Justin D. Call, M.D.

Intellectual Factors in School Performance—Alexander C. Rosen, Ph.D.

11:00—**Three Pediatric Panels**—You may go to the one of your choice.

Panel 1—**Emotional Disturbances**—A Discussion of the Shy Child and the Rebellious Child.

Panel 2—**Physical Handicaps of the School Child.**

Panel 3—**The Application of Psychological Tests**—Further Discussion of the Problems of Learning.

FRIDAY AFTERNOON, JULY 1

Medicine

The Penalties of Executive Competition

2:00—**Three Orientation Lectures:**

Physical Effects of Competition—Morton H. Maxwell, M.D.

Emotional First Aid—Marvin A. Klemes, M.D.

Community and Family Repercussions—Ralph R. Greenson, M.D.

3:30—**Two Medical Panels**—You may go to the one of your choice.

Panel 1—**Physical Problems**—The Breakdown of the Response Processes.

Panel 2—**Emotional Equilibrium**—Factors That Influence Emotional Stability.

7:00—**No-Host Cocktail Party.**

8:00—**Dinner and Professional Entertainment.** Informal Dancing to follow.

SATURDAY MORNING, JULY 2

Clinical Pathological Conferences

CHARLES M. BLUMENFELD, M.D., *Moderator*

9:30—**Pediatric Case Presentation**—Dennis N. Marks, M.D., John M. Adams, M.D.

10:30—**General Medical Case**—John B. Reardan, M.D., Morton H. Maxwell, M.D.

11:30—**Obstetrical Gynecological Presentation**—J. George Moore, M.D., John I. Davis, M.D.

SATURDAY AFTERNOON, JULY 2

Office Surgery

2:00—**Three Orientation Lectures:**

Primary Treatment of Acute Hand Injury—Franklin L. Ashley, M.D.

Sprains and Fractures—Charles O. Bechtol, M.D.

The Control of Itching—Paul Le Van, M.D.

3:30—**Three Medical Panels**—You may go to the one of your choice.

Panel 1—**Lacerations and Trauma.**

Panel 2—**Common Athletic Injuries.**

Panel 3—**Skin Tumors.**

HOST: Sacramento Society for Medical Improvement . . . **REGIONAL CHAIRMAN:** Herbert W. Korngold, M.D., 1217 30th Street, Sacramento, California . . . **INSTITUTE FEE:** $15.00. For additional information, contact Postgraduate Activities office, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5. **All California Medical Association members and their families are cordially invited to attend.**

Annual Meeting

Ambassador Hotel
LOS ANGELES

April 30 to May 3, 1961

Papers for Presentation

If you have a paper that you would like to have considered for presentation, it should be submitted *to the appropriate section secretary* (see list on this page) no later than November 15, 1960.

Scientific Exhibits

Space is available for scientific exhibits. If you would like to present an exhibit, please write immediately to the office of the California Medical Association, 693 Sutter Street, San Francisco 2, for application forms. To be given consideration by the Committee on Scientific Work, the forms, completely filled out, must be in the office of the California Medical Association no later than November 15, 1960. (No exhibit shown in 1960, and no individual who had an exhibit at the 1960 session, will be eligible until 1962.)

Medical Motion Pictures

The daytime Film Symposiums which proved so popular during the 1959 and 1960 sessions will be continued in 1961. Evening film programs will be planned for doctors, their wives, nurses and ancillary personnel.

Authors desiring to show films should send their applications to Paul D. Foster, M.D., California Medical Association, 2975 Wilshire Blvd., Los Angeles 5. All authors are urged to be present at the time of showing as there will be time allotted for discussion and questions from the audience after each film.

Deadline: November 1, 1960.

PLANNING MAKES PERFECT
AN EARLY START HELPS

SECRETARIES OF SCIENTIFIC SECTIONS

ALLERGY **Gardner S. Stout**
39 North San Mateo Drive, San Mateo

ANESTHESIOLOGY **Gilbert E. Kinyon**
5252 Chelsea Avenue, La Jolla

DERMATOLOGY AND SYPHILOLOGY . **Paul M. Crossland**
1120 Montgomery Drive, Santa Rosa

EAR, NOSE AND THROAT . . . **Marvin W. Simmons**
1020 East McKinley Avenue, Fresno

EYE **Floyd M. Bond**
625 Broadway, San Diego 1

GENERAL PRACTICE **A. J. Franzi**
3620 Army Street, San Francisco 10

GENERAL SURGERY **William P. Mikkelsen**
1930 Wilshire Boulevard, Los Angeles 57

INDUSTRIAL MEDICINE AND SURGERY **John H. Leimbach, Jr.**
525 Golden Gate Avenue, San Francisco 1

INTERNAL MEDICINE **Clifford B. Cherry**
2400 Beverly Boulevard, Los Angeles 57

OBSTETRICS AND GYNECOLOGY . . **Edward F. Healey**
711 D Street, San Rafael

ORTHOPEDICS **Bret W. Smart**
2929 Summit Street, Oakland 9

PATHOLOGY AND BACTERIOLOGY . **George J. Hummer**
1328 22nd Street, Santa Monica

PEDIATRICS **Harry O. Ryan**
194 North El Molino, Pasadena 4

PHYSICAL MEDICINE **S. Malvern Dorinson**
450 Sutter Street, San Francisco 8

PSYCHIATRY AND NEUROLOGY . . . **Robert E. Wyers**, **Mark Zeifert**
Psychiatry: Robert E. Wyers, Metropolitan Hospital, Norwalk
Neurology: Mark Zeifert, 1065 S Street, Fresno 21

PUBLIC HEALTH **Ellis D. Sox**
101 Grove Street, San Francisco 2

RADIOLOGY **John R. Bryan**
450 Sutter Street, San Francisco 8

UROLOGY **Sam Peck**
233 A Street, San Diego 1

PUBLIC HEALTH REPORT

MALCOLM H. MERRILL, *M.D., M.P.H.*
Director, State Department of Public Health

ONE OUT OF EVERY 50 Californians over the age of 40 is losing sight due to glaucoma. The estimated number of blind persons in California is 28,000. Glaucoma is the most important cause of irreversible blindness in adults. It is culpable in 14 per cent of cases. The annual cost of welfare aid provided to needy persons whose blindness is due to glaucoma is about two and a half million dollars.

* * *

The department has embarked upon a broad, new approach to the investigation of health effects to conditions of life in the establishment of a Community Population Laboratory in Alameda and Contra Costa counties.

The purpose of the study is to establish the relationship of mode of life to coronary heart disease, to certain sites of cancer, to alcoholism and other chronic conditions.

Because of the concentration of a series of such studies within one well-defined population group, intensive attention can be given to the personal and living characteristics of people which determine the occurrence of chronic disease.

* * *

Thirty-six medical students from 23 schools have been selected for summer training in the department, assigned to programs and research projects in 19 bureaus and laboratories. This is the third summer such training has been carried on.

As in the past, a high degree of student interest in the program was reflected in 393 applications received from students in 74 medical schools. The successful applicants were selected on the basis of scholarship and interest in epidemiology and public health.

* * *

As in past years, the department will maintain close surveillance this summer of cases of mosquito-borne encephalitis.

Medical students in training in the department this summer will be utilized in the surveillance activity. They will make periodic visits to hospitals and local health departments in the San Joaquin and Sacramento Valley areas to assist in the collection of clinical and epidemiologic information on suspected human cases.

The Viral and Rickettsial Disease Laboratory will participate in research studies and will provide serologic tests in the diagnosis of suspected cases. During the ten-year period 1950-59, 940 laboratory confirmed cases have occurred in California, of which 621 were due to the Western encephalitis virus and 319 to the St. Louis virus. The number of cases in a single year has varied from a high of 420 in 1952 to a low of nine in 1955.

The natural reservoir of mosquito-borne encephalitis is in birds, and special studies are being carried out by the department to obtain more knowledge of the occurrence of the disease in its natural reservoir for the purpose of developing improved methods of prevention and control.

The Bakersfield Encephalitis Research Laboratory will have as its principal project this summer the investigation of an extensive control program against the *Culex tarsalis* mosquito in Kern County to determine what effect such a program has on the transmission of the Western and St. Louis viruses. This study is being carried out as a cooperative project of the University of California School of Public Health, this department, and the Communicable Disease Center of the U. S. Public Health Service.

* * *

A good start has been made on the program authorized by the 1959 session of the Legislature to protect the public against useless and harmful methods of cancer treatment.

The Cancer Advisory Council, appointed by the Governor, held its second meeting in April to lay the foundation for collection and testing alleged cancer cure methods.

Under the direction of Dr. John W. Cline, chairman, the group has assessed the problem in California and determined first courses of action. This new program provides a sound basis for determining the value of irregular cancer treatment methods.

When the findings of the council prove a remedy worthless, the department has authority to prevent hardship and financial loss to persons and their families from such quackery.

* * *

Regulations governing the registration of possessors of sources of ionizing radiation were adopted April 22 by the State Board of Public Health as a requirement of the new state law enacted by the Legislature in its 1959 session.

NEWS & NOTES

NATIONAL • STATE • COUNTY

LOS ANGELES

Dr. Edward R. Pinckney of Beverly Hills, associate clinical professor of medicine of the College of Medical Evangelists and executive director of the college's audiovisual postgraduate extension courses in medicine, won first place in the Seventh Annual National Visual Presentation Association's awards competition held in New York City. Dr. Pinckney entered two filmstrip-tape recording medical lectures (being produced jointly by C.M.E. and Encyclopaedia Britannica Films, Inc.) in the educational classification to show how physicians who cannot attend medical meetings can keep up with the latest developments and techniques in the medical world at a minimum of expense and time.

* * *

Mr. William H. Milburn, Los Angeles, who is in his second year at the University of California School of Medicine, Los Angeles, has been awarded a $600 **Burroughs Wellcome Summer Scholarship** for research and clinical training in the field of the allergic diseases by the Allergy Foundation of America. Mr. Milburn will carry out his work under the direction of Dr. Ernest M. Heimlich, assistant professor of pediatrics (Allergy), and Dr. Stanley W. Wright, associate professor of pediatrics, at the department of pediatrics, University of California Medical Center, Los Angeles.

SAN FRANCISCO

The 46th annual Clinical Congress of the **American College of Surgeons** will be held in San Francisco, October 10 to 14. More than a thousand participants will take part in the various programs as authors of research reports, teachers of postgraduate courses, participants in panel discussions, lecturers, and operating surgeons in motion pictures and closed-circuit telecasts, according to the announcement of the meeting.

Dr. Leon Goldman, professor and chairman of the department of surgery, University of California School of Medicine, Berkeley-San Francisco, is chairman of the local committee on arrangements.

SANTA CLARA

Appointment of **Dr. Halsted R. Holman** as chief of the department of medicine at Stanford University Medical School, effective July 1, was announced recently. Dr. Holman, now on the staff of Rockefeller Institute in New York, will also serve as Guggenhime professor at Stanford. He is the son of Dr. Emile F. Holman, emeritus professor of surgery and former chief of surgery at Stanford, and Dr. Ann Purdy, emeritus clinical professor of pediatrics.

As head of the department of medicine, Dr. Holman succeeds Dr. David Rytand, who will remain on the faculty as Bloomfield professor.

HEARINGS ON C.M.A. CONTINUING EDUCATION AND SCIENTIFIC ACTIVITIES

The C.M.A. Committee on Continuing Education and Scientific Activities will hold two open hearings within the next two months. One is scheduled for 9:30 a.m., June 19, at the Hilton Inn, International Airport, San Francisco. The other will be held July 10 beginning at 9:30 a.m., at the Hyatt House, 5547 Century Boulevard, Los Angeles.

Any C.M.A. member wishing to appear at either meeting is invited to do so.

GENERAL

In a constructive effort to clear some of the misconceptions regarding **adoption procedures,** the California Medical Association has mailed its 17,000 members the recently approved "Manual of Adoptions for Physicians."

The manual is the result of a year-long study by C.M.A.'s Committee on Adoptions headed by Dr. George K. Herzog, Jr., San Francisco.

Two types are explained: the agency, or indirect method, and the independent, direct method of adoption.

* * *

Effective June 15, 1960, the Federal Aviation Agency will require that **student and private pilots** be given their medical examinations only by **designated medical examiners,** according to an announcement by the Federal Aviation Agency. This rule reinstates a practice which was in effect from 1926 until 1945. In announcing the reestablishment of this practice, Dr. James L. Goddard, the Civil Air Surgeon, emphasized his previous statements that any physician may be considered eligible for designation as an examiner. Physicians in localities where flying activities are conducted may wish to consider filing application for designation as official examiners by writing to the Civil Air Surgeon, Federal Aviation Agency, Washington 25, D. C.

POSTGRADUATE EDUCATION NOTICES

THIS BULLETIN of the dates of postgraduate education programs and the meetings of various medical organizations in California is supplied by the Committee on Postgraduate Activities of the California Medical Association. In order that they may be listed here, please send communications relating to your future medical or surgical programs to: Mrs. Margaret H. Griffith, Director, Postgraduate Activities, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5.

UNIVERSITY OF CALIFORNIA AT LOS ANGELES

Clinical Traineeships — Anesthesia, Dermatology and Pediatric Cardiology. Dates by arrangement. Minimum period—two weeks. Fee: Two weeks, $150.00; four weeks, $250.00.

General Pediatrics. Sunday through Wednesday, July 17 through 20. Lake Arrowhead, University of California Residential Conference Center. Sixteen hours. Fee: $137.50 (including room and meals).

Advance Seminar in Internal Medicine. Wednesday through Sunday, July 20 through 24. University of California Residential Conference Center, Lake Arrowhead. Eighteen hours. Fee: $150.00 (including room and meals).

Dermatologic Therapy. Monday and Tuesday, July 25 and 26. Twelve hours. Fee: $40.00.

Advanced Seminars in Dermatology (for Dermatologists). Wednesday through Sunday, July 27 through 31. University of California Residential Conference Center, Lake Arrowhead. Fourteen and one-half hours. Fee: $150.00 (including room and meals).

Anesthesia for Special Procedures. Wednesday, Thursday and Friday, August 3, 4 and 5. Eighteen hours. Fee: $60.00.

Arthritis and Rheumatism. Wednesday and Thursday, August 17 and 18. Twelve hours.*

Obstetrical Procedures and Complications. Friday and Saturday, August 26 and 27. Twelve hours. Fee: $50.00 (includes two luncheons).

Fetal Electrocardiography. Sunday, August 28. Seven hours. Fee: $20.00.

For Ancillary Personnel

The College Nurse: New Concepts in Her Profession. Friday and Saturday, June 17 and 18. Sixteen hours. Fee: $20.00.

9th Annual Symposium in Clinical Laboratory Technology. Saturday and Sunday, June 18 and 19. Sixteen hours. Fee: $20.00.

Workshops for School Nurses:

Riverside, Tuesday through Saturday, June 21 through 25. Forty-five hours. Fee: $40.00.

Los Angeles, Tuesday through Saturday, July 5 through 9. Forty-five hours. Fee: $40.00.

San Diego, Wednesday through Sunday, July 13 through 17. Forty-five hours. Fee: $40.00.

Methods in Determining Course Content and Collection of Clinical Experiences in Maternal and Child Health Nursing. Monday through Friday, July 11 through 22. Sixty hours. Fee: $60.00.

Cardiac Workshop: Nursing Care of the Cardiac Patient Who Undergoes Surgical Intervention. Monday through Friday, July 25 through August 12. Seventy-five hours. Fee: $90.00.

Contact: Thomas H. Sternberg, M.D., assistant dean for Continuing Medical Education, U.C.L.A. Medical Center, Los Angeles 24. BRadshaw 2-8911, Ext. 7114.

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Crisis: The Recognition and Management of Emotional Responses to Critical Situations. Thursday through Saturday, June 16 through 18. Twenty-one hours. Fee: $10.00.

Obstetrics and Gynecology. Thursday to Saturday, September 15 to 17. Twenty-one hours. Fee: $50.00.

A Course in Industrial Medicine. Monday through Wednesday, September 12 through 14. Twenty-one hours.*

Advances in Surgical Anatomy, Normal Anatomy and Histology of the Eye. Thursday through Saturday, September 22 through 24. Twenty-one hours.*

Internal Medicine. Wednesday through Sunday, September 28 through October 2. Thirty-five hours.*

Surgery, Franklin Hospital. Saturday and Sunday, October 8 and 9. Fourteen hours.*

Dermatology. Friday and Saturday. October 14 and 15. Fourteen hours.*

Advances in Ophthalmic and General Pathology. Thursday through Saturday, November 3 through 5. Twenty-one hours.*

Psychologic Problems of Medical Practice. Friday through Sunday, November 11 through 13. Twenty-one hours.*

Symposium on Ear-Nose-Throat Problems in Children, Children's Hospital. Saturday, November 19. Seven hours. Fee: $12.50.

A Course in Ophthalmology. Thursday through Saturday, December 1 through 3. Twenty-one hours. Fee: $12.50.

Symposium on Eye Problems in Children, Children's Hospital. Saturday, January 14. Seven hours. Fee: $12.50.

Symposium on Perinatal Problems, Children's Hospital. Saturday, March 11. Seven hours. Fee: $12.50.

Fundamental Practices of Radioactivity and the Diagnostic and Therapeutic Uses of Radioisotopes. Two or three month course limited to one enrollee per month. Fee: $350.00.

For Ancillary Personnel

Integration of Psychiatric Principles in the Total Curriculum. Tuesday to Friday, July 5 to August 12. Fee: $100.00.

Cancer Nursing. Wednesday through Friday, August 10 through 12.*

Nursing and People. Monday through Friday, August 15 through 26. Fee: $30.00.

Continuing Education Conference Series. Tuesday through Friday, September 6 through 16.*

Administration of Nursing Care. Tuesdays, September 13 through December 13. Fee: $45.00.

Nutritional Aspects of Nursing Care. September 21 through November 9.*

Contact: Seymour M. Farber, M.D., assistant dean, Department of Continuing Medical Education, University of California Medical Center, San Francisco 22. MOntrose 4-3600, Ext. 665.

STANFORD HOSPITAL, SAN FRANCISCO
(Lane Presbyterian Medical Center)

Eye Conference. Each Monday morning.

Didactic Course in Ophthalmology. Monday and Wednesday, 7 to 8:30 p.m.

Postgraduate Conference, Retinal Detachment. Wednesday, Thursday and Friday, September 14, 15, 16.

Contact: Arthur Selzer, M.D., program committee chairman, San Francisco-Stanford Hospital, Clay and Webster Sts., San Francisco 15.

*Fees to be announced.

UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES

Cardiac Resuscitation. Sponsored by the Los Angeles County Heart Association each Wednesday throughout the year, 4 to 6 p.m. USC Medical Research Building, Room 211, 2025 Zonal Avenue. Residents and interns of Los Angeles County, and all armed forces medical personnel admitted without fee. Tuition for all other physicians: $30.00. (Each session all-inclusive.)

Basic Home Course in Electrocardiography. One year postgraduate series, electrocardiogram interpretation by mail. Physicians may register at any time and receive all 52 issues. Fifty-two weeks. Fee: $100.00.

Advance Home Course in Electrocardiography. One year postgraduate series, electrocardiogram interpretation by mail. Fifty-two issues: $85.00. Physicians may register at any time.

Hawaii Course: The USC School of Medicine will offer the Third Postgraduate Refresher Course to be held in Honolulu and on board the S.S. *Lurline* from August 4 to August 20, 1960. (As a time and money saver, round trip air travel is also possible August 4 to August 14.)

Contact: Phil R. Manning, M.D., associate dean and director, Postgraduate Division, University of Southern California School of Medicine, 2025 Zonal Avenue, Los Angeles 33. CApital 5-1511.

COLLEGE OF MEDICAL EVANGELISTS

CLINICAL TRAINEESHIPS available in all clinical departments by arrangement with the Postgraduate Division and the chairman of the department or departments involved. Eighty hours minimum. Fee: As arranged.

Diseases of the Chest: Two and four-week Traineeships in cooperation with the Los Angeles County Hospital. Dates as arranged.

Anesthesia. Monday through Friday. Dates as arranged. Six months. Fee: $350.

JOINT MANIPULATION. Monday through Friday, 8:00 to 12:00, dates to be arranged. Twenty hours. Fee: $75.00.

Alumni Postgraduate Convention Refresher Courses, March 12 and 13, on the campus of the College of Medical Evangelists at White Memorial Hospital.

For information contact: G. E. Norwood, M.D., assistant dean and chairman, Division of Postgraduate Medicine, College of Medical Evangelists, 1720 Brooklyn Ave., Los Angeles 33. ANgelus 9-7241, Ext. 214.

CALIFORNIA MEDICAL ASSOCIATION

POSTGRADUATE INSTITUTE—1960

(Tenth Anniversary Year)

Sacramento Valley Counties in cooperation with UCLA School of Medicine, July 1 and 2. Tahoe Tavern, Lake Tahoe. *Chairman:* Herbert W. Korngold, M.D., 1217 30th Street, Sacramento.

Contact: The chairmen listed above, or Postgraduate Activities Office, California Medical Association, 2975 Wilshire Boulevard, Los Angeles 5.

AUDIO-DIGEST FOUNDATION, a nonprofit subsidiary of the C.M.A., offers (on a subscription basis) a series of six different hour-long tape recordings covering general practice, surgery, internal medicine, obstetrics and gynecology, pediatrics and anesthesiology. Designed to keep physicians posted on what is new and important in their respective fields, these programs survey current national and international literature of interest and contain selected highlights of on-the-spot recordings of national scientific meetings, panel discussions, symposia, and individual lectures. Audio-Digest Internal Medicine will shortly be available on long-play discs, requiring only a 33 1/3 rpm phonograph to utilize the service. For information contact Mr. Claron L. Oakley, Editor, 1919 Wilshire Blvd., Los Angeles 57, HUbbard 3-3451.

Medical Dates Bulletin

AUGUST MEETINGS

GERONTOLOGICAL SOCIETY, INC., Mark Hopkins Hotel, San Francisco. August 7 through 12. *Contact:* Mrs. Marjorie Adler, administrative secretary, 660 S. Kingshighway Blvd., St. Louis 10.

RENO SURGICAL SOCIETY 10th Annual Conference. August 18, 19 and 20. The Mapes Hotel, Reno. *Contact:* Harry B. Gilbert, M.D., 275 Hill Street, Reno, Nevada.

AMERICAN ASSOCIATION OF BLOOD BANKS, Jack Tar Hotel, San Francisco. August 21 through 26. *Contact:* John B. Alsever, M.D., secretary, 1211 W. Washington St., Phoenix, Arizona.

AMERICAN HOSPITAL ASSOCIATION, Civic Auditorium, San Francisco. August 27 through September 1. *Contact:* Mr. Maurice J. Norby, assistant director, 18 E. Division St., Chicago.

SEPTEMBER MEETINGS

PACIFIC DERMATOLOGIC ASSOCIATION INC. 12th Annual Meeting. Empress Hotel, Victoria, British Columbia. September 2 through 4. *Contact:* Edward Ringrose, M.D., secretary, 2636 Telegraph Ave., Berkeley.

OREGON STATE MEDICAL SOCIETY, Portland. September 7 through 9. *Contact:* Mr. Roscoe K. Miller, executive secretary, 1115 S. W. Taylor St., Portland 5, Oregon.

NEVADA STATE MEDICAL ASSOCIATION Annual Meeting. September 7 through 10. Stardust Hotel, Las Vegas. *Contact:* Nelson B. Neff, executive secretary, P. O. Box 2790, Reno, Nevada.

POSTGRADUATE ASSEMBLY OF SAINT JOHN'S HOSPITAL. September 8 through 10. 9 a.m. to 4 p.m., St. John's Hospital, Santa Monica. *Contact:* John C. Eagan, M.D., director, 1328 22nd St., Santa Monica.

SANTA BARBARA COUNTY HEART ASSOCIATION Physicians Symposium. September 17, 9:00 a.m. to 5:00 p.m., Biltmore Hotel, Santa Barbara. *Contact:* E. J. Hannon, executive director, 18 La Arcada Court, Santa Barbara.

CALIFORNIA SOCIETY OF INTERNAL MEDICINE Annual Meeting, Yosemite. September 23, 24 and 25. *Contact:* Barbara E. Oulton, executive secretary, 350 Post St., San Francisco 8.

WASHINGTON STATE MEDICAL ASSOCIATION Annual Convention. September 25 through 28. Olympic Hotel, Seattle, Washington. *Contact:* R. W. Neill, executive secretary, 1309 7th Avenue, Seattle, Washington.

Pan-Pacific Surgical Association 8th Intensive Surgical Congress, embracing all Surgical Specialties. September 27 through October 5. Honolulu, Hawaii. *Contact:* F. J. Pinkerton, M.D., director general, Suite 230, Alexander Young Building, Honolulu 13.

OCTOBER MEETINGS

American Society of Plastic and Reconstructive Surgery. Statler Hotel, Los Angeles, October 2 through 7. *Contact:* Thomas R. Broadbent, M.D., secretary, 508 E. S. Temple, Salt Lake City.

San Diego County Heart Association 10th Annual Symposium on Heart Disease. October 3 and 4. El Cortez Hotel. *Contact:* O. Martin Avison, 3545 Fourth Avenue, San Diego 3.

American Association for the Surgery of Trauma. Coronado Hotel, San Diego. October 5 through 7. *Contact:* William T. Fitts, Jr., M.D., secretary, 3400 Spruce St., Philadelphia 4.

Los Angeles County Heart Association 30th Annual Professional Symposium on Cardiovascular Diseases. October 5 and 6. Beverly Hilton Hotel, Beverly Hills. *Contact:* Los Angeles County Heart Association, 2405 W. 8th St., Los Angeles 57.

San Francisco Heart Association 30th Annual Postgraduate Symposium on Heart Disease. October 5 through 7. St. Francis Hotel, San Francisco. *Contact:* Mr. Lawrence I. Kramer, Jr., executive director, 259 Geary St., San Francisco 2.

Western Industrial Medical Association combined Meeting with 4th Western Industrial Health Conference. October 7 through 9. Jack Tar Hotel, San Francisco. *Contact:* Verne G. Ghormley, M.D., president, 3032 Tulare Street, Fresno 21.

American College of Surgeons, 46th Annual Clinical Congress, San Francisco. October 10 to 14. *Contact:* William E. Adams, M.D., secretary, 40 E. Erie St., Chicago 11.

American Cancer Society California Division Annual Meeting. October 13 through 15. Villa Hotel, San Mateo. *Contact:* Jane N. Lounsbury, assistant director, Field Services, 467 O'Farrell, San Francisco.

Kaiser Foundation Hospitals in Northern California Fourth Annual Symposium on Human Genetics. October 14 and 15. Fairmont Hotel, San Francisco. *Contact:* Martin A. Shearn, M.D., Director of Medical Education, 280 West MacArthur Blvd., Oakland.

California Academy of General Practice 12th Annual Scientific Assembly. October 16 through 19. Masonic Memorial Temple, San Francisco. *Contact:* William W. Rogers, executive secretary, 461 Market St., San Francisco 5.

Western Orthopedic Association Annual Convention. October 22 through 27. Hotel Del Coronado, Coronado. *Contact:* Mrs. Vi Mathieson, executive secretary, 354 21st St., Oakland 12.

Association of State and Territorial Health Officers. Jack Tar Hotel, San Francisco. October 26 through 28. *Contact:* A. C. Offutt, M.D., secretary-treasurer, 1330 W. Michigan Street, Indianapolis 7.

St. Jude Hospital—Fullerton 2nd Annual Postgraduate Assembly. October 27 and 28. St. Jude Hospital. *Contact:* B. L. Tesman, M.D., chairman, St. Jude Hospital, Fullerton.

American School Health Association, San Francisco. October 30 through November 4. *Contact:* A. O. DeWeese, M.D., executive secretary, 515 E. Main St., Kent, Ohio.

American Public Health Association, San Francisco. October 31 through November 4. *Contact:* Berwyn F. Mattison, M.D., executive director, 1790 Broadway, New York 19.

NOVEMBER MEETINGS

San Diego County General Hospital 14th Annual Postgraduate Assembly. Wednesday and Thursday, November 2 and 3. San Diego County General Hospital, North End of Front Street, San Diego. *Contact:* Frank H. Carter, M.D., chairman, 2001 Fourth Avenue, San Diego 1.

American Society of Tropical Medicine and Hygiene. Biltmore Hotel, Los Angeles. November 2 through 5. *Contact:* Rolla B. Hill, M.D., executive secretary, 3575 St. Gaudens Rd., Miami 33, Florida.

California Conference of Local Health Officers Fall Meeting, November 15 and 16. State Department of Public Health, 2151 Berkeley Way, Berkeley 4. *Contact:* State Department of Public Health, Berkeley.

1961 MEETINGS

College of Medical Evangelists Annual Alumni Postgraduate Convention. Scientific Assembly, Ambassador Hotel, March 14, 15 and 16. *Contact:* F. Harriman Jones, M.D., general chairman, College of Medical Evangelists, 316 North Bailey Street, Los Angeles 33.

California Medical Association Annual Meeting, Ambassador Hotel, Los Angeles. April 30 through May 3. *Contact:* John Hunton, executive secretary, 693 Sutter Street, San Francisco 2; or Ed Clancy, director of public relations, 2975 Wilshire Blvd., Los Angeles 5.



THE PHYSICIAN'S *Bookshelf*

CALL THE DOCTOR—A Social History of Medical Men —Ernest S. Turner; St. Martins Press, 175 Fifth Avenue, New York, 1958. 320 pages, $3.95.

The real flavor of this delightfully written book can only be savored by personal reading of the entire volume. Here is a history of medical practitioners from 1300 to the present time which combines pungent prose with historical fact in such a fashion as to produce a book of non-fiction which reads like a best selling novel. The story opens in Chaucer's day and begins with a summary of the physician's rules of that time:

"When called to a patient, find out from his messenger as much about him as you can before you arrive. Then if his pulse and urine tell you nothing, you can still surprise him with your knowledge of his condition.

"Do not be in a hurry to give an opinion on the patient. It will be more valued by the family if they have to wait for it.

"Tell the patient that with God's help you hope to cure him, but inform the relatives that the case is grave. Then, if he dies, you will have safeguarded yourself. If he recovers, it will be a testimony to your skill and wisdom.

"If you are asked to dinner do not be over-effusive in your gratitude, and do not quibble about accepting the place of honor at the table. Be neither indiscreet nor exacting. Do not criticize the food, even if it is millet bread which turns your stomach. Stay sober. During the meal, enquire frequently after the patient, lest he suspect that you have forgotten him in your enjoyment of his viands.

"Do not disparage your fellow physicians. If you do not know them personally, say you have heard nothing but good of them.

"Avoid the company or friendship of laymen. They make a habit of mocking doctors, and besides, it is not always easy to extract a fee from an intimate."

There are many other rules.

In the 1300's physicians and surgeons alike were almost completely ignorant of the most elementary functions of the human body. Although the art of medicine seems to have been fairly well understood, certainly the science was lacking. It was not until the renaissance was well under way that the church, having been forced to yield ground, began to authorize occasional dissections and it was not until 1543 that Vesalius published his great exposure of the errors of Galen's anatomy. There has been considerable dispute with regard to the church prohibition against anatomical dissection. It is said that the 1300 edict of Pope Boniface the Eighth was issued merely for the purpose of prohibiting the Crusaders from carving up their dead to ship home the bones but it must be admitted that the decree was widely regarded as a ban on anatomical dissection.

Medical pressure groups were strong in the 15th Century. There were then the Physicians, the Surgeons, the Barbers and the Apothecaries. The Physicians organized themselves first by forming the Royal College of Physicians in 1518. They were soon granted power to license and control the practice of medicine and surgery, first in London and then for all England. Prior to that time the church issued licenses to practice in London. The Royal College exercised with vigor its powers to fine and imprison unqualified practitioners and to search the apothecaries shops for bad drugs and poisons. The College even disciplined some of its own members for malpractice and unethical behavior. Sometimes if the physician being disciplined was under the protection of a great Lord the execution of the sentence became difficult.

The Surgeons in this period were small in number and by comparison with the Physicians their social status was poor and their manners were rough. They had little academic training. Research was sometimes rather practical, if inhuman.

In 1559 when Henry II of France had his eye pierced in a joust, by a splinter through his visor, his surgeons beheaded four criminals and then thrust broken truncheons into their eyes at the same angle in order to see precisely what injury the King had sustained.

The Surgeons in turn were able to look down upon the Barbers who had been encouraged by the church because of their skill in tonsuring monks to practice minor surgery. The Barbers had possessed a charter since 1462 and while much of their surgery was confined to lancing boils, treating corns and pulling teeth, they frequently undertook to set broken limbs and perform amputations. It was in 1540 that the Surgeons and the Barbers arranged a marriage of convenience and were duly chartered by Henry VIII. The record of disciplinary sessions of the Barber-Surgeons' Court indicates that such things as accepting money in advance for cures that could not be effected; failure to present dangerously ill patients to the master Surgeons and conducting dissections in private homes were causes for rebuke as being malpractice. The Surgeons clashed repeatedly with the Physicians because the Surgeons were not permitted to prescribe medicines internally.

The fourth group was the Apothecaries, disdained by the Physicians and in turn disdaining the grocers from whose ranks they sprang. It was in 1617 that James I obligingly incorporated them as the Society of Apothecaries. For generations to come apothecaries and grocers were able to quarrel fruitlessly on the theme, "What is a drug?" The Apothecaries claimed, on not very good grounds, that the right to prescribe and administer medicines had been granted them in 1542.

When we today become overly concerned about the public attitude toward the medical profession we may be reassured by the physicians' ability to survive the 17th Century. The public of that time was no longer satisfied having an ailment identified by its Latin name. They wanted it cured. The physician was mocked on all sides for his more vulnerable failings—his pretentions, his pedantries, his second-hand aphorisms, his quarrelsomeness and his covetousness. Still he was the only doctor there was, so when they felt out of sorts they sent him their urine and then jeered at the gravity with which he tried to "shake it into a disease."

The symbol of the doctor in the 18th Century was his gold-headed cane. It is described as a wand of office which helped him to impress the patient. It sometimes had a utilitarian function for it contained in its head an aromatic material designed to offset the foul vapors of sick rooms and hospital wards.

The way was slowly prepared through the 18th Century for the tremendous advantages of the 19th Century. There still was no real system of medical education and training, but those who desired to become Physicians, and had considerable private means passed through the academic futilities of Oxford and Cambridge or took to medical schools on the continent of Europe. Those with more modest means apprenticed themselves to practitioners and thereby acquired with their virtues, their prejudices and faults. While some few of these apprentices would visit a hospital, many of them entered practice directly from their apprenticeship.

The Scots founded the first medical school in Great Britain at Edinburgh along the lines of the Boerhaave School at Leyden. Other universities such as those of Aberdeen and St. Andrews, however, were prone to give diplomas to those who had undergone no examination but who perhaps had been able to persuade a couple of not very eminent physicians to certify them fit for practice. Scots degrees could even be obtained from brokers in London at that time. The prestige of the physicians was doubtless saved by the founding in the early half of the 18th Century of the big voluntary hospitals.

The course of medicine is traced through the days when theory-spinners would hatch frail and dubious hypotheses for the solution of every ailment, through the experiences associated with grave robbing and the purchasing of the newly-hanged so that anatomy might be learned by dissection, to the time when the disciples of Sydenham really learned the power of observation. The multiplication of medical schools in the early 19th Century increased the demand for "subjects" and led to the formation of what was euphemistically called "the resurrectionists."

About 1800 when there were some 300 students dissecting in London, the price of a subject rarely exceeded 1 or 2 guineas, but 20 years later there were 1,000 students and the price had shot up to 8, 10 and even 15 guineas. In France the situation was less difficult since those who died in hospitals and were unclaimed for 24 hours were automatically sent for dissection. The resurrectionists of Sir Astley Cooper, the famous surgeon, were the most powerful of all. Sir Astley Cooper often spent hundreds of pounds supporting their families when they were jailed for grave-robbing.

Sometimes the resurrectionists obtained the bodies of former patients for him in order that he might check on the cause of death. Sir Astley boasted before the Select Committee on Anatomy that "there was no person let his situation in life be what it may, whom if he were disposed to dissect, he could not obtain."

Though progress was slow the *London Times* wrote on January 25, 1856, "Of the 3 learned professions, the medical has attained the highest character for disinterestedness. Hard things are said of the cupidity of the clergy, the wealth of certain benefices affording a strange contrast to the poverty of the primitive Church; still harder things are said of the lawyers, who are supposed to eat the contested oyster while the plaintiff gets one shell and the defendant the other; but there is probably no class of the community generally so free from mercenary motives as the members of the medical and surgical profession." In that same year, however, that same newspaper pointed out how little there was that medicine could do for almost any physical ailment.

It was 1858 before a Medical Registration Act reached the Statute book. This is one of the landmarks of medical history. It set up a Register for the profession which determined the minimum qualifications for admission to that Register. When the act was passed it was estimated that only 1 in 3 of the practitioners in the British Isles had taken the trouble to obtain formal qualifications of any kind.

With regard to medical jurisprudence the author quotes: "Medical evidence delivered in our courts of law has of late become a public scandal and a professional dishonour. The Bar delights to sneer at and ridicule it; the Judge on the bench solemnly rebukes it; the public stand by in amazement and honourably minded members of our profession are ashamed of it. . . . What is the public to think when, for example, they see three doctors on one side swearing on behalf of a railway company that the plaintiff is not suffering from any injury at all; and three on the other side swearing that he is not only suffering from an injury but is seriously damaged and probably for life?" This is from the *British Medical Journal*, May 2, 1863.

E. S. Turner paints a grim picture of the conditions which brought about state medicine in England. These merit detailed reading by every physician as the facts are well documented and could help us chart a course, not only better for medicine but also for the patient.

In the 19th Century, the specialists were mainly the eye, ear and nose and throat men, the obstetricians and the "mind doctors." By Edwardian times, the general practitioner was beginning to be concerned about his own status. Tremendous advances in medicine, surgery and the ancillary sciences made it clear that no one man could master the whole field of medicine. Specialisms began to multiply very rapidly. There was considerable discontent in the profession, probably some if it engendered by the revolution through which it was passing. There were too many doctors. For every practitioner who charged a guinea there was one who charged five shillings and another who was ready to take sixpence. Unscrupulous manufacturers were teaching the nation to dose itself with medicines which should have been prescribed if at all, by doctors. In 1906, a newspaper announced that it would give free medical advice to anyone who filled in a coupon.

Ungrateful or opportunist patients had taken to suing surgeons for what they fancied to be malpractice, but the formation of a medical defense league began to discourage the litigious. George Bernard Shaw and the socialists made strong recommendations that all doctors should be turned into Civil Servants. There were many kinds of contract practice at this time. A doctor might organize a personal club for impecunious families and perhaps charge twopence or threepence a week per family. A few hard pressed doctors employed canvassers to persuade people to join their clubs. Large numbers of doctors were laboring in varying degrees of bondage to all sorts of groups such as Oddfellows, Druids, Foresters, Rechabites, Gardeners, and so forth. The effectiveness of such contract practice seemed to depend largely upon the individual practitioner.

There were many abuses under these contract practices. Master tradesmen, publicans and others, who often earned more than the doctor, had no qualms about joining clubs which entitled them to treatment at a penny a week. There was constant pressure on the physician to issue perjured certificates, certifying an individual as unfit for work. *The British Medical Journal* of July 22, 1905 published the results of a survey of its members on the subject of Contract practice. Much of the material in this report would bear wider circulation today.

The matter culminated in 1911. Lloyd George introduced his National Insurance Bill to Parliament. Perhaps you recall his statement: "Never was legislation more needed. Never was it less wanted." Tremendous opposition was pre-

sented by the medical profession to the bill but the opposition among the profession was far from unanimous. In June 1911, the British Medical Association drew up its list of demands which included free choice of doctor by the patient, doctors to be answerable not to friendly societies but to insurance committees on which the profession was represented, medical and maternity benefits to be administered by insurance committees, not friendly societies, an income limit of two pounds per insured person, and so forth. The friendly societies referred to are the ones which had organized contract practices. Most of the concessions were granted before the bill passed. The capitation fee was increased and the profession began to be divided. In a new poll of physicians on the panel question, 11,219 voted against participation, 2,409 in favor, but about 13,000 abstained. In the end, the revolt of the doctors was broken by the doctors themselves. At Bradford, England says the author, the local practitioners had refused to touch the panel system and the town's insurance committee advertised for candidates and at once received applications from three times as many doctors as they needed. Fifty of these applicants were to be appointed when the dissenting doctors hurriedly decided they would work the panel scheme.

The battle left many scars. The British Medical Association, many felt, had been revealed as just another stubborn trade union with the difference that other trade unions were able to invoke more solidarity in their ranks. Its leaders had been spoiling for a fight and their noses had been bloodied. The Association's own proposals for insurance schemes had been buried in the battle. The fact that for many generations the same association had campaigned for numerous schemes for social betterment and improvements in public health, most recently in the school medical service, was forgotten, if indeed it was ever known.

As the book draws to a close and approaches the present day, it points up the general social and professional changes which were urged upon the profession. The British Medical Association itself, had proposed valuable reforms and advances, most of which had been rejected by stiff-necked politicians. A great deal of nonsense was talked on all sides on the theme of free choice of doctor. It was a topic on which the man on the street, if he thought about it at all, was liable to have cynical views. If his doctor sold out overnight to a new man, where did free choice of doctor come in. Generally, the patients stayed with the take-over doctor unless they had powerful reasons for disliking him. Doctors were more often chosen on frivolous grounds such as the year and make of car or the number of new hats the doctor's wife was seen to be wearing, than his own personal skill.

The safeguarding of the doctor-patient relationship was also apt to be too subtle a concept for the ordinary man. The March 6, 1948 Lancet struck a realistic note with regard to the doctor-patient relationship. After another period of revolt and stiff opposition by the British Medical Association the National Health Service Bill passed in November of 1946. The destruction of the physician's opposition was accomplished much in the same fashion as had been done earlier with the Lloyd George bill.

The doctors' campaign had many lessons, not least in the field of public relations. The doctor is in the hands of the politicians, says Turner. All parties and almost all newspapers tend to take his grievances with a pinch of salt, chiefly because the British Medical Association has a reputation for over-playing its hand. Yet, it is evident that there is a vociferous section of doctors for whom the association is not militant enough, quite apart from those doctors who believe it is militant in the wrong direction. The patient, who is not without his irritations at this stage, is apt to grow impatient with doctors' behavior in the mass, especially when they group themselves under political labels. Yet, as a rule, he has no quarrel with and indeed, every admiration for his own doctor. He likes to think his doctor will not strike, even if all the others do.

We might end by saying, "He who hath an ear to hear, let him hear."

EUGENE S. HOPP, M.D.

* * *

CURRENT APPROACHES TO PSYCHOANALYSIS—Edited by Paul H. Hoch, M.D., Dept. of Mental Hygiene, State of New York; College of Physicians and Surgeons, Columbia University, New York City; and Joseph Zubin, Ph.D., Dept. of Mental Hygiene, State of New York; Dept. of Psychology, Columbia University, New York City. (The Proceedings of the Forty-Eighth Annual Meeting of the American Psycho-Pathological Association, held in New York City, February 1958). Grune & Stratton, 381 Park Ave. South, New York 16, N. Y., 1960. 207 pages, $6.50.

"Current Approaches to Psychoanalysis" consists of a group of papers (and their discussions) which were presented at the 1958 meeting of the American Psychopathological Association. The stated purpose of the symposium was to bring together some of the outstanding current trends in psychoanalysis by providing a platform for the representatives of each of these trends. If it were hoped that the differences between various schools of psychoanalysis would be clearly highlighted in a way that could be understood by either the public or the medical profession, the editors have failed to achieve their objective.

A brief outline of the Psychoanalytic Theory of the Neuroses by Robert Waelder, an attempt at a critical analysis of Freud's contributions by Sandor Rado, a review of the thinking of Harry Stack Sullivan and Erich Fromm by Clara Thompson, and a summary of Karen Horney's Theory of Neurosis by Joseph Vollmer-Hausen are included along with a series of papers on clinical applications and evaluation studies. These will not help very much toward clarifying for the medical profession the many questions it has about psychiatry and psychoanalysis. The serious student of behavior, personality development, and of comparative treatments for emotional disorders, will find parts of the book interesting.

NORMAN Q. BRILL, M.D.

* * *

DISEASES OF THE NOSE, THROAT AND EAR—A Handbook for Students and Practitioners—Seventh Edition—I. Simson Hall, M.B., Ch.B., F.R.C.P.E., F.R.C.S.E., Surgeon to the Royal Infirmary, Edinburgh (Department for Diseases of Nose, Throat and Ear). Distributed in the United States by the Williams & Wilkins Co., Baltimore 2, Maryland, 1959. 467 pages, with eight colored plates, $5.00.

Although this seventh edition of Mr. I. Simson Hall's handbook entitled "Diseases of the Nose, Throat and Ear" (first edition published in 1937) is well organized, brief, and nicely written, it shares the usual defects of other new editions of little old medical books written and revised by distinguished authors. The little volume is not adequately revised; in some places it is amusingly archiac, but elsewhere the lack of revision is most disturbing. Those readers who are primarily interested in medical history will find the illustrations and the list of formulae (included in the appendix) to be very absorbing.

Since our schools are devoting increasingly larger numbers of hours to the teaching of otorhinolaryngology, this handbook cannot be recommended as a text for American medical students. It is unsuitable for use as a reference book by physicians engaged in practice or in postgraduate training.

CHARLES P. LEBO, M.D.

California MEDICINE

INDEX TO VOLUME 92, JANUARY-JUNE, 1960

AUTHOR INDEX

A

	PAGE
Abbott, Donald H., *Loma Linda*	433
Ajalat, M. P., *Calexico*	350, 406
Anderson, Robert M., *Los Angeles*	260, 434
Anderson, W. W., *San Francisco*	400
Andrews, Alan V., *Los Angeles*	143
Auerback, Alfred, *San Francisco*	422

B

Babow, Irving, *San Francisco*	422
Baker, Frances, *San Mateo*	330
Baker, William S., Jr., Capt., MC, USN, *San Diego*	25
Beam, Elaine, *Los Angeles*	403
Bechtol, Charles O., *Los Angeles*	264
Berman, Walter E., *Beverly Hills*	339
Bernstein, Sol, *Los Angeles*	434
Bissell, D. M., *San Jose*	416
Bocian, J. J., *Fresno*	413
Breslaw, Leonard, *Beverly Hills*	430
Brewer, Timothy F., *Los Angeles*	350
Brisbane, Joseph, *Beverly Hills*	342
Brotman, David M., *Culver City* (LE)	169
Brown, Reynold F., *San Francisco*	16
Brown, Roland G., *San Diego*	409
Buerger, Walter R., *Covina*	403

C

Callaway, Claude, *San Francisco*	422
Campbell, Douglass A., *Los Angeles*	418
Cantor, Edward B., *Los Angeles*	7, 142
Carr, Jesse L., *San Francisco*	323, 426
Chapman, W. Max, *Berkeley*	217
Cohn, Roy, *Palo Alto*	13
Connolly, John E., *Palo Alto*	397
Conti, James G., Jr., *Culver City* (LE)	169
Coulson, Walter, *San Francisco*	334
Crane, Milton G., *Los Angeles*	285
Culiner, Morris M., *San Francisco*	221

D

Dobson, Leonard G., *San Francisco*	201
Dorsey, Clete S., *Pasadena*	40, 353
Dullum, Dell F., *Berkeley*	198

E

Epstein, John H., *San Francisco*	135
Escamilla, Roberto F., *San Francisco*	121

F

Feldman, David H., *Sherman Oaks*	226
Fessel, W. Jeffrey, *San Francisco*	266
Fields, Albert, *Los Angeles*	204
Fluhmann, C. Frederic, *San Francisco*	194
Freedland, Morris E., *Long Beach*	41
Friesen, Arnold R., *Pasadena*	274

G

Gerstle, Mark Lewis, *Sacramento*	277
Greaney, E. M., Jr., *North Hollywood*	133
Greenspan, Francis S., *San Francisco*	201

H

Haining, R. B., *Glendale*	436
Haining, R. G., *Boston*	436
Hanafee, William, *Los Angeles*	283
Hassard, Howard, *San Francisco*	306
Heald, John, *San Francisco*	334
Heck, Walter E., *San Francisco*	201
Herschensohn, Herbert L., *Santa Monica*	31
Hibbard, Lester T., *Los Angeles*	143
Hill, Frank de M., *San Francisco*	125
Holtzman, Alan E., *Beverly Hills*	339
Horner, Howard, *Los Angeles*	263

J

Jaros, R. Mary, *San Francisco*	400
Joergenson, Eugene J., *Glendale*	210
Joffe, Bernard, *San Francisco*	164
Josselson, Albert J., *Alhambra*	326

K

Kagan, Benjamin, *Los Angeles*	4
Kay, Jerome Harold, *Los Angeles*	260, 434
Kirkpatrick, John E., *San Francisco*	147
Kirtland, Howard B., Jr., *San Diego*	409
Klapman, Martin J., *Los Angeles*	163
Kushner, Joseph, *San Francisco*	221

L

Levan, Norman, *Bakersfield*	353
Levy, Ruth J., *San Jose*	345
Lewis, Arline, *Berkeley*	271
Lieberman, Jack, *Los Angeles*	11
Lyons, Harold M., *San Francisco*	194

M

Macrae, Donald, *San Francisco*	255
Marcus, Joseph Harvey (CMA)	238
Marcus, Stanley, *Sherman Oaks*	226
Marmelzat, Willard, *Beverly Hills*	353
Marmer, Milton J., *Los Angeles*	10
Marmor, Leonard, *Los Angeles*	264, 407
McDonald, Richard T., *San Diego*	409
McInnes, Robert S., *San Jose*	416
McNaught, Robert C., *San Francisco*	201
Miller, Arthur C., *Loma Linda*	433
Mink, Morrie, *San Francisco*	221
Montero, Jose C., *San Francisco*	280
Montgomery, Theodore A., *Berkeley*	271

KEY TO ABBREVIATIONS USED

(Or.)—Original Article; (Ed.)—Editorial; (CMA)—California Medical Association; (CR)—Case Report; (I)—Information; (LE)—Letters to the Editor; (PE)—Page End; (MJ)—Medical Jurisprudence.

O

Odou, Bruce L., *Montebello* 338
Odou, Eugene R., *Montebello* 338
Ottoman, Richard E., *Los Angeles* 38

P

Parmelee, Arthur H., Sr., *Los Angeles* 6
Pierce, Frank T., Jr., *Los Angeles* 283
Pulaski, Edwin J., Colonel, MC, U.S.A., San Francisco 35

R

Ramey, Ernest Edgar, Jr., *Los Angeles* 150
Rapaport, Samuel I., *Los Angeles* 165
Rebhun, Joseph, *Pomona* 207
Reynolds, T. Eric, *Oakland* 1

S

Schube, Purcell G., *Pasadena* 274
Shor, Robert, *Los Angeles* (LE) 230
Simmons, Marvin W., *Fresno* 155
Smith, Donald R., *San Francisco* 125
Smith, John W., *Palo Alto* 397
Snyder, William H., Jr., *Los Angeles* 159
Soelling, Warner M., *Modesto* 220
Solomon, George F., *San Francisco* 266
Sperling, Harry H., *Sherman Oaks* 226
Stein, Justin J., *Los Angeles* 38, 189, 385
Steiner, Albert A., *San Francisco* 348
Stern, Curt, *Berkeley* 21
Swift, Sheldon, *Los Angeles* 139

T

Taylor, Lloyd W., Colonel, MC, U.S.A. *San Francisco* 35
Tolentino, Paulino, *Los Angeles* 260, 434

W

Wahl, Charles William, *Los Angeles* 336
Watts, Malcolm S. M., *San Francisco* 422
Whang, Junshick, *Seoul, Korea* 212
Wirtschafter, Samuel K., *Los Angeles* 165
Woolley, Morton M., *Los Angeles* 210
Wright, Phyllis, *Los Angeles* 403

Z

Zavala, Donald C., *El Centro* 224

SUBJECT INDEX

A

A.M.A., C.M.A. Delegation to the (CMA) 292
A.M.A. Meeting (CMA) 47
Abbott-Rawson Tube, Use of the, Bruce L. Odou and Eugene R. Odou (Or.) 338
Abdominal Aneurysm, Ruptured, with Pain in the Testicle, Martin J. Klapman (CR) 163
Accident and Health Insurance Premiums, Tax Deductibility and Status of (I) 179
Accidental Poisoning, Epidemiology of, D. M. Bissell and Robert S. McInnis (Or.) 416
Actions (Brief) at C.M.A. Annual Meeting (CMA) 233
Acute Epiglottitis, Walter E. Berman and Alan E. Holtzman (Or.) 339
Adult Chickenpox Pneumonia, Bernard Joffe (CR) 164
Adhesions, Intestinal, Present Status of Prevention and Treatment, John E. Connolly and John W. Smith (Or.) 397
Advertising, Pharmaceutical (Ed.) 229
Aged, Blue Shield Medical Coverage for (I) 65
(Aged) Health Services for the Elderly (Ed.) 440
Aging, Health Care for, *see Forand Bill*
Agricultural and Rural Community Poison Control, Operation of an Information Center, J. J. Bocian (Or.) 413
Alcohol, Blood Test, Legal Effect of Participation in, Howard Hassard (I) 306
Alcoholism in San Francisco—A Community Study and Recommended Program, Irving Babow, Malcolm S. M. Watts, Alfred Auerback, and Claude Callaway (Or.) 423
Anesthesiologist's Point of View (of) Pulmonary Hyaline Membrane Disease, Milton J. Marmer (Or.) 10
Aneurysm, Abdominal, Ruptured, with Pain in the Testicle, Martin J. Klapman (CR) 163
Aneurysm, Dissecting, of the Aorta, Rupture of, Relationship of Effort to Onset, Roy Cohn (Or.) 13
Aneurysm, Left Ventricular, Removal of, with the Heart Exposed and Circulation Maintained by Heart-Lung Machine, Jerome Harold Kay, Robert M. Anderson, Sol Bernstein and Paulino Tolentino (CR) 434
Aneurysms, Single Stage Resection of Seven, Arthur C. Miller and Donald H. Abbott (CR) 433
Anisometropia in Children, Severe, Special Value in, (and use of) Corneal Contact Lenses, Albert A. Steiner (Or.) 348
Annual Meeting, (C.M.A.) Brief Actions of (CMA) 233
Annual Meeting (C.M.A.) Transactions of House of Delegates (CMA) 357
Annual Reports (CMA) 72
Antimalarial Drug Therapy, Synthetic, in Lupus Erythematosus and Polymorphous Light Eruptions, John H. Epstein (Or.) 135
Aorta, Dissecting Aneurysm, Rupture of, Relationship of Effort to Onset, Roy Cohn (Or.) 13
Aortic Stenosis — Surgical Treatment Under Direct Vision, Using the Heart-Lung Machine, Jerome Harold Kay, Robert M. Anderson and Paulino Tolentino, (Or.) 260
Arteritis, Temporal, A Report of Two Cases Without Systemic Symptoms, Morris E. Freedland (CR) 41
Artery Disease, Basilar, Clinical Manifestations, W. W. Anderson and R. Mary Jaros (Or.) 400
Arthritis, Rheumatoid, Current Therapy and Medical Management, Albert J. Josselson (Or.) 326
Arthritis, Rheumatoid, Present Day Management of—Panel Discussion 326 to 333
Arthritis, Rheumatoid, Present-Day Physical Therapy, Frances Baker (Or.) 330

B

Back, *see Disability of the, in Industrial Workers.*
Basilar Artery Disease—Clinical Manifestations, W. W. Anderson and R. Mary Jaros (Or.) 400
Behavioral Characteristics of Dangerous Drivers—Importance of Correction, Arnold R. Friesen and Purcell G. Schube (Or.) 274
Biopsy, Diagnosis by, of Carcinoma in Situ of the Uterine Cervix, C. Frederic Fluhmann and Harold M. Lyons (Or.) 194
Blood Alcohol Test, Legal Effect of Participation in, Howard Hassard (I) 306
Blue Shield Medical Care—Coverage for the Aged (I) 65
Bone Banks—A New Concept in Procurement and Storage for Homologous Grafts, Leonard Marmor (Or.) 407
Bostick, Warren L., New President-Elect (CMA) 232
Brain Damage in the Infant—Genetic Aspects, Curt Stern (Or.) 21

Breast Cancer, Advanced, Palliation for, (by) Trans-Septal-Sphenoid Subtotal Hypophysectomy, Walter E. Heck, Robert C. McNaught, Leonard G. Dobson and Francis S. Greenspan (Or.) ... 201
Breast Duct Papilloma, A Theory of the Genesis of, Junshick Whang (Or.) ... 212

C

C.M.A. Annual Meeting, (Brief) Actions at (CMA) ... 233
C.M.A. Delegation to the A.M.A. (CMA) ... 292
C.M.A. Scientific and Educational Functions, A Study of (Ed.) ... 44
(C.P.S.) Blue Shield Medical Care—Coverage for the Aged (I) ... 65
C.P.S. Board of Trustees (CMA) ... 358
Calcified Cervical Discs in a Child, Frank T. Pierce, Jr., and William Hanafee (CR) ... 283
California Youth Authority Psychiatric Treatment Program, The—Its Historical Significance and Philosophy, Mark Lewis Gerstle (Or.) ... 277
Cancer of the Lung in Women, Richard E. Ottoman and Justin J. Stein (Or.) ... 38
Cancer, Skin, in Smallpox Vaccination Scars, A Report of Five Cases, Clete S. Dorsey, Willard Marmelzat, and Norman Levan (CR) ... 353
Carcinoma in Situ of the Uterine Cervix—Diagnosis by Biopsy, C. Frederic Fluhmann and Harold M. Lyons (Or.) ... 194
Carcinoma of the Uterine Cervix—Interstitial Radioactive Colloidal Gold Therapy of the Lateral Pelvic Nodes, William S. Baker, Jr. (Or.) ... 25
Cardiac Arrest—Successful Resuscitation in the Hospital Outside the Operating Rooms, William H. Snyder, Jr. (Or.) ... 159
Cervical Discs, Calcified, in a Child, Frank T. Pierce, Jr., and William Hanafee (CR) ... 283
Cervix, Conization of the, Not an Innocuous Procedure, Howard Horner (Or.) ... 263
Cervix, Uterine, Carcinoma in Situ of the, Diagnosis by Biopsy, C. Frederic Fluhmann and Harold M. Lyons (Or.) ... 194
Chickenpox Pneumonia, Adult, Bernard Joffe (CR) ... 164
Child, Calcified Cervical Discs in a, Frank T. Pierce, Jr., and William Hanafee (CR) ... 283
Children and Infants, Vomiting as a Symptom of Serious Disease in, E. M. Greaney, Jr. (Or.) ... 133
Clinical Observations on Iproniazid in Idiots with Epilepsy, Joseph Rebhun (Or.) ... 207
Closed Reduction and Open Treatment (of) Femoral Shaft Fractures, A Study of, Ernest Edgar Ramey, Jr. (Or.) ... 150
Committee, Governor's, The (Ed.) ... 354
Common Granulomatous Inflammations of the Extremities, John E. Kirkpatrick (Or.) ... 147
Community Mental Health Services—Operation in San Jose, Ruth J. Levy (Or.) ... 345
Community Study, A, (of) Alcoholism in San Francisco, and Recommended Program, Irving Babow, Malcolm S. M. Watts, Alfred Auerback and Claude Callaway (Or.) ... 422
Compazine®, *see Proclorperazine*
Congenital Esophageal Stenosis, Morris M. Culiner, Joseph Kushner and Morrie Mink (CR) ... 221
Congenital Varicella with Primary Varicella Pneumonia, Timothy F. Brewer (CR) ... 350
Conization of the Cervix—Not an Innocuous Procedure, Howard Horner (Or.) ... 263
Corneal Contact Lenses—Special Value in Severe Anisometropia in Children, Albert A. Steiner (Or.) ... 348
Coroner and the Common Law, Jesse L. Carr (Or.):
I. Introduction ... 323
II. Functions of the Coroner ... 426
Parts III, IV and V in Volume 93 to follow.
Corticosteroids, Intranasal Injection of, Marvin W. Simmons (Or.) ... 155
(Cox, Frank J.) Milestones (Ed.) ... 289
Cramps, Leg, Albert Fields (Or.) ... 204
Cystic Fibrosis, Theodore A. Montgomery and Arline Lewis (Or.) ... 271

D

Deductibility of Traveling Expenses (I) ... 305
Diabetes, Spontaneous Remission of, R. B. Haining and R. G. Haining (CR) ... 436
Disability of the Back in Industrial Workers—Are Work Restrictions Justified on Roentgen Abnormalities Alone?, Herbert L. Herschensohn (Or.) ... 31
Discoid Lupus Erythematosus, Peripheral Neuritis Associated with, Clete S. Dorsey (CR) ... 40
Doctor in the Middle, The (Major Medical Insurance Policies' Physicians' Fees—"Reasonable or Customary") (CMA) ... 304
Drivers, Dangerous, Behavioral Characteristics of, Importance of Correction, Arnold R. Friesen and Purcell G. Schube (Or.) ... 274
Drug Industry, Efforts by the, Guides for Medical Education (I) ... 243
Duodenal Ileus, Mesenteric, Warner M. Soelling (CR) 220

E

Elbow and Wrist Injuries in Sports, Leonard Marmor and Charles O. Bechtol (Or.) ... 264
Elderly, Health Services for the (Ed.) ... 440
Entertainment Expenses, Deductibility of (for) Income Taxes (I) ... 64
Epidemiology of Accidental Poisoning, D. M. Bissell and Robert S. McInnes (Or.) ... 416
Epiglottitis, Acute, Walter E. Berman and Alan E. Holtzman (Or.) ... 339
Epilepsy, Iproniazid, Clinical Observations on Idiots with, Joseph Rebhun (Or.) ... 207
Esophageal Stenosis, Congenital, Morris M. Culiner, Joseph Kushner and Morrie Mink (CR) ... 221
Examinations, Physical, for Physicians, David M. Brotman and James G. Conti, Jr. (LE) ... 169
Expenses, Traveling, Deductibility of (I) ... 305

F

Familial Occurrence of Chronic Lymphocytic Leukemia and Multiple Myeloma, The, Samuel K. Wirtschafter and Samuel I. Rapaport (CR) ... 165
(Fees, Physicians', "Reasonable or Customary," and Major Medical Insurance) The Doctor in the Middle (CMA) ... 304
Femoral Shaft Fractures—A Study of Closed Reduction and Open Treatment, Ernest Edgar Ramey, Jr. (Or.) 150
Fibrosis, Cystic, Theodore A. Montgomery and Arline Lewis (Or.) ... 271
"Fiery Trial" of Private Practice, The (Voluntary Health Insurance)—Report of the Commission on Medical Services (CMA) ... 293
(Forand Bill and Medical Care for Aging) ... 45, 65, 440
Forand Time Again (Ed.) ... 45
Fractures, Femoral Shaft, A Study of Closed Reduction and Open Treatment of, Ernest Edgar Ramey, Jr. (Or.) ... 150
Functions of the Coroner (Part II of Coroner and the Common Law), Jesse L. Carr (Or.) ... 426

G

Gastric Polyps and Malignant Disease, Leonard Breslaw (CR) ... 430
Genetic Aspects (of) Brain Damage in the Infant, Curt Stern (Or.) ... 21
Gold Therapy, Radioactive Colloidal, Interstitial, (in) Carcinoma of the Uterine Cervix, William S. Baker, Jr. (Or.) ... 25
Governor's Committee, The (Ed.) ... 354
Grafts, Homologous, A New Concept in Procurement and Storage for, Bone Banks, Leonard Marmor (Or.) 407
Granulomatous Inflammations, Common, of the Extremities, John E. Kirkpatrick (Or.) ... 147
Green, John, The Rough Road to Smooth Sailing, of (I) 180
Guides for Medical Education; Efforts by the Drug Industry (I) ... 243

H

Handicapped, The Work Potential of the, Physician's Role in Evaluating, Jose C. Montero (Or.) ... 280
Health and Accident Insurance Premiums, Tax Deductibility and Status of (I) ... 179
(Health Care for the Aging), *see Forand Bill*
Health Report (Malcolm H. Merrill) (Ed.) ... 46
Health Services for the Elderly (Ed.) ... 440
Heart Disease Under Workmen's Compensation, Douglass A. Campbell (Or.) ... 418
Heart-Lung Machine, (Use of, in) Aortic Stenosis, Surgical Treatment Under Direct Vision, Jerome Harold Kay, Robert M. Anderson and Paulino Tolentino (Or.) ... 260
Heart-Lung Machine, (Use of), (to) Maintain Circulation in Removal of Left Ventricular Aneurysm When the Heart Is Exposed, Jerome Harold Kay, Robert M. Anderson, Sol Bernstein and Paulino Tolentino (CR) ... 434
Hernia, Technique for Repair (of), Joseph Brisbane (Or.) ... 342
Heat Stroke and Body Temperature of 109° F., Recovery from, M. P. Ajalat (CR) ... 350
Correction ... 406
Homologous Grafts, A New Concept in Procurement and Storage for, Bone Banks, Leonard Marmor (Or.) 407
Hormonal Preparations, Newer, Roberto F. Escamilla (Or.) ... 121
House of Delegates (C.M.A.), Transactions ... 357
Human Tissue Preservation—Development of Regulations and Removal of Some Legal Barriers, W. Max Chapman (Or.) ... 217
Hypertension, Psychodynamics of, The, Charles William Wahl (Or.) ... 336
Hyperthyroidism, Periodic Paralysis Associated with, Milton G. Crane (CR) ... 285
Hypophysectomy, Trans-Septal-Sphenoid Subtotal, Palliation for Advanced Cancer of the Breast, Walter E. Heck, Robert C. McNaught, Leonard G. Dobson and Francis S. Greenspan (Or.) ... 201

I

Identification and Privilege Card, Uniformed Services, (DD 1173) Medicare Changes (I) ... 243
Idiots with Epilepsy, Clinical Observations on Iproniazid in, Joseph Rebhun (Or.) ... 207
Ileus, Mesenteric Duodenal, Warner M. Soelling (CR) 220
Income Taxes—Deductibility of Entertainment Expenses (I) ... 64
Industrial Workers, Disability of the Back in, Herbert L. Herschensohn (Or.) ... 31
Infants and Children, Vomiting as a Symptom of Serious Disease in, E. M. Greaney, Jr. (Or.) ... 133
Infants, Brain Damage in the Infant, Genetic Aspects, Curt Stern (Or.) ... 21
Infections, Pyogenic, in Orthopedic Surgery, Prevention and Management, Edwin J. Pulaski and Lloyd W. Taylor (Or.) ... 35
Injuries, Elbow and Wrist, in Sports, Leonard Marmor and Charles O. Bechtol (Or.) ... 264
"Integration Conference" in a General Hospital, Walter R. Buerger, Phyllis Wright and Elaine Beam (Or.) ... 403
Internist's Point of View (of) Pulmonary Hyaline Membrane Disease, Jack Lieberman (Or.) ... 11
Intestinal Adhesions—Present Status of Prevention and Treatment, John E. Connolly and John W. Smith (Or.) ... 397
Intranasal Injection of Corticosteroids, Marvin W. Simmons (Or.) ... 155
Iproniazid, Clinical Observations on, In Idiots with Epilepsy, Joseph Rebhun (Or.) ... 207

J

John Green's Rough Road to Smooth Sailing (I) ... 180

L

Left Ventricular Aneurysm, Removal of, with the Heart Exposed and Circulation Maintained by Heart-Lung Machine, Jerome Harold Kay, Robert M. Anderson, Sol Bernstein and Paulino Tolentino (CR) ... 434
Leg Cramps, Albert Fields (Or.) ... 204
Legal Effect of Participation in Blood Alcohol Test, Howard Hassard (I) ... 306
Leukemia, Lymphocytic, Chronic, The Familial Occurrence of, and Multiple Myeloma, Samuel K. Wirtschafter and Samuel I. Rapaport (CR) ... 165
Light Eruptions, Polymorphous, Synthetic Antimalarial Drug Therapy in, John H. Epstein (Or.) ... 135
Lobar Pneumonia—The Distribution of Sites in Infants and Children, John Heald and Walter Coulson (Or.) ... 334
(Lum, Donald D.) Milestones (Ed.) ... 289
Lung, Cancer of the, in Women, Richard E. Ottoman and Justin J. Stein (Or.) ... 38
Lupus Erythematosus, Discoid, Peripheral Neuritis Associated with, Clete S. Dorsey (CR) ... 40
Lupus Erythematosus, Systemic, Psychosis and, a Review of the Literature and Case Reports, W. Jeffrey Fessel and George F. Solomon (Or.) ... 266

M

Malignant Disease and Gastric Polyps, Leonard Breslaw (CR) ... 430
Medical Care, Blue Shield, Coverage for the Aged (I) 65
Medical Education, A Million Dollars for (Ed.) ... 167
Medical Education, Guides for—Efforts by the Drug Industry (I) ... 243
Medical Examiner, *see Coroner and the Common Law*
Medicare Changes — DD 1173, Uniformed Services Identification and Privilege Card (I) ... 243
Medicare, More (CMA) ... 66
Medicine at Mid-Century, T. Eric Reynolds (Or.) ... 1
Mental Health Services, Community, Operation in San Jose, Ruth J. Levy (Or.) ... 345
Mesenteric Duodenal Ileus, Warner M. Soelling (CR) ... 220
8-Methoxypsoralen — A Short Review and Comment, Sheldon Swift (Or.) ... 139
Milestones (Retirement of Drs. Donald Lum and Frank Cox from active C.M.A. committee work) (Ed.) ... 289
Million Dollars for Medical Education, A (Ed.) ... 167
More Medicare (CMA) ... 66
Myeloma, Multiple, and the Familial Occurrence of Chronic Lymphocytic Leukemia, Samuel K. Wirtschafter and Samuel I. Rapaport (CR) ... 165

N

Neuritis, Peripheral, Associated with Discoid Lupus Erythematosus, Clete S. Dorsey (CR) 40
Neurologic Aspects of Vertigo, The—Analysis of 400 Cases, Donald Macrae (Or.) 255
Newer Hormonal Preparations, Roberto F. Escamilla (Or.) 121
Number and Distribution of Physicians in California, Justin J. Stein (Or.) 189
Correction 385

O

Obstetrician's Point of View (of) Pulmonary Hyaline Membrane Disease, Edward B. Cantor (Or.) 7
Correction 142
Open Treatment and Closed Reduction (of) Femoral Shaft Fractures, A Study of, Ernest Edgar Ramey, Jr. (Or.) 150
Orthopedic Surgery, Prevention and Management (of) Pyogenic Infections in, Edwin J. Pulaski and Lloyd W. Taylor (Or.) 35
Oxytocin, Synthetic, Lester T. Hibbard and Alan V. Andrews (Or.) 143

P

Palliation for Advanced Cancer of the Breast—Trans-Septal-Sphenoid Subtotal Hypophysectomy, Walter E. Heck, Robert C. McNaught, Leonard G. Dobson and Francis S. Greenspan (Or.) 201
Pancreas, Transection of the, by Blunt Trauma, Morton M. Woolley and Eugene J. Joergenson (Or.) 210
Panel Discussion—Present Day Management of Rheumatoid Arthritis 326 to 333
Panel Discussion—Pulmonary Hyaline Membrane Disease 4 to 12
Papilloma, Breast Duct, A Theory of the Genesis of, Junshick Whang (Or.) 212
Paralysis, Periodic, Associated with Hyperthyroidism, Milton G. Crane (CR) 285
Pathogenesis (of) Pulmonary Hyaline Membrane Disease, Benjamin Kagan (Or.) 4
Pediatrician's Point of View (of) Pulmonary Hyaline Membrane Disease, Arthur H. Parmelee, Sr. (Or.) 6
Pelvic Nodes, Lateral, Interstitial Radioactive Colloidal Gold Therapy of (in) Carcinoma of the Uterine Cervix, William S. Baker, Jr. (Or.) 25
Periodic Paralysis Associated with Hyperthyroidism, Milton G. Crane (CR) 285
Peripheral Neuritis Associated with Discoid Lupus Erythematosus, Clete S. Dorsey (CR) 40
Perphenazine (Trilafon®) and Proclorperazine (Compazine®), Trismus Due to, Stanley Marcus, David H. Feldman and Harry H. Sperling (CR) 226
Pharmaceutical Advertising (Ed.) 229
Pheochromocytoma—A Report of 12 Cases, Frank de M. Hill and Donald R. Smith (Or.) 125
Physical Examinations for Physicians, David M. Brotman and James G. Conti, Jr. (LE) 169
Physicians and Population (Ed.) 167
Physicians in California, Number and Distribution of the, Justin J. Stein (Or.) 189
Correction 385
Physicians, Physical Examinations for, David M. Brotman and James G. Conti, Jr. (LE) 169
Pneumonia, Adult Chickenpox, Bernard Joffe (CR) 164
Pneumonia, Lobar, The Distribution of Sites in Infants and Children, John Heald and Walter Coulson (Or.) 334
Podiatrist and Medicine, The, Robert Shor (LE) 230
Poison Control—Operation of an Information Center in a Rural and Agricultural Community, J. J. Bocian (Or.) 413
Poisoning, Accidental, Epidemiology of, D. M. Bissell and Robert S. McInnes (Or.) 416
Polyps, Gastric, and Malignant Disease, Leonard Breslaw (CR) 430
Positive Public Relations (Ed.) 355
Present Day Management of Rheumatoid Arthritis—Current Therapy and Medical Management, Albert J. Josselson 326
Present-Day Physical Therapy, Frances Baker 330
President-Elect, New C.M.A., Warren L. Bostick (CMA) 232
Private Practice, The "Fiery Trial" of—Report of the Commission on Medical Services (Voluntary Health Insurance) (CMA) 293
Proclorperazine (Compazine®) and Perphenazine (Trilafon®), Trismus Due to, Stanley Marcus, David H. Feldman and Harry H. Sperling (CR) 226
Professional Liability, Recent Trends in, Medical Review and Advisory Board (CMA) 57
Psychiatric Treatment Program (of) the California Youth Authority, Its Historical Significance and Philosophy, Mark Lewis Gerstle (Or.) 277
Psychodynamics of Hypertension, The, Charles William Wahl (Or.) 336
Psychosis and Systemic Lupus Erythematosus—a Review of the Literature and Case Reports, W. Jeffrey Fessel and George F. Solomon (Or.) 266
Public Health Officers, Radiation Facts for, Reynold F. Brown (Or.) 16
Public Relations (Ed.) 290
Public Relations, Positive (Ed.) 355
Pulmonary Hyaline Membrane Disease—A Panel Discussion:
Pathogensis, Benjamin Kagan (Or.) 4
Pediatrician's Point of View, Arthur H. Parmelee, Sr. (Or.) 6
Obstetrician's Point of View, Edward B. Cantor (Or.) 7
Correction 142
Anesthesiologist's Point of View, Milton J. Marmer (Or.) 10
Internist's Point of View, Jack Lieberman (Or.) 11
Pulseless Disease (Takayashu's Syndrome), Donald C. Zavala (CR) 224
Pyogenic Infections in Orthopedic Surgery—Prevention and Management, Edwin J. Pulaski and Lloyd W. Taylor (Or.) 35

R

Radiation Facts for Public Health Officers, Reynold F. Brown (Or.) 16
Radiation—Registration of Sources, Dell F. Dullum (Or.) 198
Radioactive Colloidal Gold Therapy, Interstitial, of the Lateral Pelvic Nodes (in) Carcinoma of the Uterine Cervix, William S. Baker, Jr. (Or.) 25
Recent Trends in Professional Liability, Medical Review and Advisory Board (CMA) 57
Recovery from Heat Stroke and Body Temperature of 109° F., M. P. Ajalat (CR) 350
Correction 406
Removal of Left Ventricular Aneurysm with the Heart Exposed and Circulation Maintained by Heart-Lung Machine, Jerome Harold Kay, Robert M. Anderson, Sol Bernstein and Paulino Tolentino (CR) 434
Resection, Single Stage, of Seven Aneurysms, Arthur C. Miller and Donald H. Abbott (CR) 433

Resuscitation, Successful, in the Hospital Outside the Operating Rooms (after) Cardiac Arrest, William H. Snyder, Jr. (Or.) 159
Rheumatoid Arthritis—Current Therapy and Medical Management, Albert J. Josselson (Or.) 326
Rheumatoid Arthritis, Present Day Management of—Panel Discussion 326, 333
Rheumatoid Arthritis—Present-Day Physical Therapy, Frances Baker (Or.) 330
Roentgen Abnormalities, Justification of Work Restrictions on, *see Disability of the Back in Industrial Workers*
Rupture of Dissecting Aneurysm of the Aorta—The Relationship of Effort to Onset, Roy Cohn (Or.) 13
Ruptured Abdominal Aneurysm with Pain in the Testicle, Martin J. Klapman (CR) 163
Rural and Agricultural Community Poison Control, Operation of an Information Center, J. J. Bocian (Or.) 413

S

San Jose, Community Mental Health Services, Operation in, Ruth J. Levy (Or.) 345
Scientific and Educational Functions of C.M.A., A Study of (Ed.) 44
Shaft Fractures, Femoral, A Study of Closed Reduction and Open Treatment, Ernest Edgar Ramey, Jr. (Or.) 150
Short-Doyle Program, *see Community Mental Health Services*
Single Stage Resection of Seven Aneurysms, Arthur C. Miller and Donald H. Abbott (CR) 433
Skin Cancer in Smallpox Vaccination Scars—A Report of Five Cases—Clete S. Dorsey, Willard Marmelzat and Norman Levan (CR) 353
Smallpox Vaccination Scars, Skin Cancer in, A Report of Five Cases, Clete S. Dorsey, Willard Marmelzat and Norman Levan (CR) 353
Spontaneous Remission of Diabetes, R. B. Haining and R. G. Haining (CR) 436
Stenosis, Aortic, Surgical Treatment Under Direct Vision, Using the Heart-Lung Machine, Jerome Harold Kay, Robert M. Anderson and Paulino Tolentino (Or.) 260
Stenosis, Esophageal, Congenital, Morris M. Culiner, Joseph Kushner and Morrie Mink (CR) 221
Study of C.M.A. Scientific and Educational Functions (Ed.) 44
Symptom of Serious Disease in Infants and Children, Vomiting as a, E. M. Greaney, Jr. (Or.) 133
Synthetic Antimalarial Drug Therapy in Lupus Erythematosus and Polymorphous Light Eruptions, John H. Epstein (Or.) 135
Synthetic Oxytocin, Lester T. Hibbard and Alan V. Andrews (Or.) 143

T

Takayashu's Syndrome (Pulseless Disease), Donald C. Zavala (CR) 224
Tax Deductibility—The Status of Accident and Health Insurance Premiums (I) 179
Technique for Hernia Repair, A., Joseph Brisbane (Or.) 342
Temperature, Body, of 109° F., Heat Stroke and, Recovery from, M. P. Ajalat (CR) 350
Correction 406
Temporal Arteritis—A Report of Two Cases Without Systemic Symptoms, Morris E. Freedland (CR) 41
Theory of the Genesis of Breast Duct Papilloma, A, Junshick Whang (Or.) 212
Thrombophlebitis, Treatment of, Howard B. Kirtland, Jr., Roland G. Brown and Richard T. McDonald (Or.) 409
Tissue, Human, Preservation, Development of Regulations and Removal of Some Legal Barriers, W. Max Chapman (Or.) 217
Transactions of the House of Delegates (CMA) 357
Transection of the Pancreas by Blunt Trauma, Morton M. Woolley and Eugene J. Joergenson (Or.) 210
Trans-Septal-Sphenoid Subtotal Hypophysectomy, Palliation for Advanced Cancer of the Breast, Walter E. Heck, Robert C. McNaught, Leonard G. Dobson and Francis S. Greenspan (Or.) 201
Trauma, Blunt, Transection of the Pancreas (Due to), Morton M. Woolley and Eugene J. Joergenson (Or.) 210
Traveling Expenses, Deductibility of (I) 305
Treatment of Thrombophlebitis, Howard B. Kirtland, Jr., Roland G. Brown and Richard T. McDonald (Or.) 409
Trilafon®, *see Perphenazine*
Trismus Due to Perphenazine (Trilafon®) and Proclorperazine (Compazine®), Stanley Marcus, David H. Feldman and Harry H. Sperling (CR) 226

U

Use of the Abbott-Rawson Tube, The, Bruce L. Odou and Eugene R. Odou (Or.) 338
Uterine Cervix, Carcinoma in Situ of the, Diagnosis by Biopsy, C. Frederic Fluhmann and Harold M. Lyons (Or.) 194
Uterine Cervix, Carcinoma of, Radioactive Colloidal Gold Therapy of, William S. Baker, Jr. (Or.) 25

V

Vaccination Scars, Smallpox, Skin Cancer in, A Report of Five Cases, Clete S. Dorsey, Willard Marmelzat and Norman Levan (CR) 353
Varicella Pneumonia, Primary, Congenital Varicella with, Timothy F. Brewer (CR) 350
Vertigo, Neurologic Aspects of, The, Analysis of 400 Cases, Donald Macrae (Or.) 255
Voluntary Health Insurance, *see "Fiery Trial" of Private Practice*
Vomiting as a Symptom of Serious Disease in Infants and Children, E. M. Greaney, Jr. (Or.) 133

W

Warren L. Bostick, New C.M.A. President-Elect (CMA) 232
Women, Cancer of the Lung in, Richard E. Ottoman and Justin J. Stein (Or.) 38
Work Potential of the Handicapped—The Physician's Role in Evaluating it, Jose C. Montero (Or.) 280
Work Restrictions, *see Disability of the Back in Industrial Workers*
Workmen's Compensation, Heart Disease Under, Douglass A. Campbell (Or.) 418
Wrist and Elbow Injuries in Sports, Leonard Marmor and Charles O. Bechtol (Or.) 264

Y

Youth Authority (of) California Psychiatric Treatment Program, The, Its Historical Significance and Philosophy, Mark Lewis Gerstle (Or.) 277

EDITORIALS

Forand Time Again 45
Governor's Committee, The 354
Health Report (Malcolm H. Merrill) 46
Health Services for the Elderly 440
Milestones (Retirement of Drs. Donald Lum and Frank Cox from active C.M.A. committee work) 289

Million Dollars for Medical Education, A ... 167
Pharmaceutical Advertising ... 229
Physicians and Population ... 167
Positive Public Relations ... 355
Public Relations ... 290
Study of C.M.A. Scientific and Educational Functions ... 44

CALIFORNIA MEDICAL ASSOCIATION

Actions at C.M.A. Annual Meeting ... 233
Annual Reports ... 73
Transactions of the House of Delegates ... 357
Council Meeting Minutes:
453rd Meeting, October 31, 1959 ... 50
454th Meeting, December 12, 1959 ... 170
455th Meeting, January 9, 1960 ... 234
456th Meeting, February 19-24, 1960 ... 299
457th Meeting, February 24, 1960 ... 301
458th Meeting, March 26, 1960 ... 381
459th Meeting, April 23-24, 1960 ... 442
A.M.A. Meeting ... 47
C.M.A. Delegation to the A.M.A. ... 292
C.P.S. Board of Trustees ... 358
Bostick, Warren L., New C.M.A. President-Elect ... 232
Doctor in the Middle, The (Major Medical Insurance Policies' Physicians' Fees—"Reasonable or Customary") ... 304
"Fiery Trial" of Private Practice, The (Voluntary Health Insurance)—Report of the Commission on Medical Services ... 293
More Medicare ... 66
Obituary Correction ... 238
Recent Trends in Professional Liability (C.M.A. Medical Review and Advisory Board) ... 57

INFORMATION

Blue Shield Medical Care—Coverage for the Aged ... 65
Deductibility of Traveling Expenses ... 305
Guides for Medical Education; Efforts by the Drug Industry ... 243
John Green's Rough Road to Smooth Sailing ... 180
Medicare Changes — DD 1173 — Uniformed Services Identification and Privilege Card ... 243
Tax Deductibility—The Status of Accident and Health Insurance Premiums ... 179

BOOK REVIEWS

Anesthesia for Infants and Children, *Smith* ... 251
Antibiotic Therapy for Staphylococcal Diseases, *Welch & Finland* ... 320
Arterial Wall, The, *Lansing* ... 321
Behavioral Change in the Clinic, *Pascal* ... 322
Between Years, The, *Gerstle* ... 320
Call the Doctor, *Turner* ... 454
Care of Minor Hand Injuries, The, *Flatt* ... 252
Care of the Patient with a Stroke, *Smith* ... 320
Centaur, *Marti-Ibanez* ... 72
Christopher's Minor Surgery—8th Ed., *Ochsner & DeBakey* ... 320
Clinical Auscultation of the Heart—2nd Ed., *Levine & Harvey* ... 251
Clinical Coordination of Anatomy and Physiology, *Pitel & Schellig* ... 322
Clinical Psychopathology, *Schneider* ... 394
Current Approaches to Psychoanalysis, *Hoch & Zubin* ... 456
Current Medical References, *Sanazaro* ... 319
Diagnosis and Treatment of Menstrual Disorders and Sterility, Mazer and Israel's—4th Ed., *Israel* ... 187
Differential Diagnosis of Abdominal Pain, The, *Mellinkoff* ... 186
Diseases of the Nose, Throat and Ear—7th Ed., *Hall* ... 456
Disturbances in Gastrointestinal Motility, *Rider & Moeller* ... 188
Doctors and Patients, *Fabricant* ... 320
Doctor's Life of John Keats, A, *Wells* ... 252
Evaluation of the Pelvis in Obstetrics, Moloy's—2nd Ed., *Steer* ... 395
Golden Scalpel, The, *Kern* ... 393
Group Psychotherapy—2nd Ed., *Klapman* ... 188
Guide to Antibiotic Therapy, A, *Welch* ... 186
Handbook of Poisoning—2nd Ed., *Dreisbach* ... 253
Instructional Course Lectures—Vol. XVI, 1959, *Reynolds* ... 396
Intern's Manual—2nd Ed., *Bernstein* ... 187
Introduction to Colposcopy, *Bolten* ... 395
Jewish Medical Ethics, *Jakobovits* ... 250
Kinesiology and Applied Anatomy, *Rasch and Burke* ... 393
Mazer and Israel's Menstrual Disorders and Sterility—4th Ed., *Israel* ... 187
Medical Management of the Menopause, *Goldberg* ... 253
Medieval and Renaissance Medicine, *Gordon* ... 396
Megaloblastic Anemias, The, *Herbert* ... 250
Menstrual Disorders and Sterility, Mazer and Israel's—4th Ed., *Israel* ... 187
Microbial Variation, *Timakov* ... 374
Middle Ear, The, *Kobrak* ... 392
Modern Family Health Guide, The, *Fishbein* ... 318
Molecules and Mental Health, *Gibbs* ... 319
Moloy's Evaluation of the Pelvis in Obstetrics—2nd Ed., *Steer* ... 395
Navy Surgeon, *Pugh* ... 187
Observations on Direct Analysis, *Brody* ... 318
Pediatric Pathology, *Stowens* ... 319
Peripheral Vascular Diseases, *Winsor* ... 186
Physical Diagnosis, *Prior & Silberstein* ... 72
Physiology of the Eye—3rd Ed., *Adler* ... 251
Poisoning—2nd Ed., *Dreisbach* ... 253
Practical Guide for General Surgical Management, *Sterling* ... 322
Practice of Clinical Child Psychology, *Ross* ... 394
Principles of Disability Evaluation, *Smith* ... 72
Progress in Hematology—Vol. II, *Tocantins* ... 254
Psychiatry: Descriptive and Dynamic, *Smith* ... 395
Psychopathy, *Frankenstein* ... 252
Pyelonephritis, *Colby* ... 318
Radiologic Examination of the Small Intestine—2nd Ed., *Golden* ... 396
Relaxation and Exercise for Natural Childbirth—2nd Ed., *Heardman* ... 321
Roentgenologic Diagnosis in Ophthalmology, *Hartmann & Gilles* ... 321
Smoking and Health, *Ochsner* ... 317
Soil, Grass and Cancer, *Voisin* ... 253
Surgeon and the Child, The, *Potts* ... 254
Symposium on Glaucoma, *Clark* ... 322
Synopsis of Ear, Nose, and Throat Diseases, *Ryan et al* ... 254
Synopsis of Gynecology—5th Ed., *Crossen et al* ... 254
Synopsis of Ophthalmology, *Havener* ... 322
Systemic Lupus Erythematosus, *Baehr & Klemperer* ... 254
Technic and Practice of Psychoanalysis, *Saul* ... 392
Textbook of Medicine—10th Ed., *Cecil & Loeb* ... 317
Way of Life, A, and Selected Writings of Sir William Osler, *Osler* ... 188

Babcock, Claude Elliott, January 26, 1960 238
Bacon, Edison Pierce, February 18, 1960 297
Barkan, Hans, March 7, 1960 385
Barker, Joseph Michael, January, 1960 238
Bloch, Jesse LeRoy, November 15, 1959 60
Bramkamp, Allan Lewis, November 14, 1959 60
Brandon, Thomas Campbell, March 29, 1960 385
Brust, Paul Raymond, December 24, 1959 172
Bucknam, Ralph Waldo Emerson, January 29, 1960 238
Beck, Gerald Henderson, April 4, 1960 446
Christensen, Eugene L., March 22, 1960 385
Clark, Gordon Hay, November 22, 1959 60
Cobbs, Peter Price, February 1, 1960 238
Costolow, William Evert, November 22, 1959 60
Crane, Jay Freeman, April 20, 1960 446
Cummins, Joseph L., September 18, 1959 238
Curtis, Charles Glenn (C. Glenn), November 15, 1959 60
Dougall, John Park (J. Park), March 31, 1960 385
Drake, James Carl, October 7, 1959 238
Ealy, John Taylor, January 19, 1960 238
Fiese, Marshall J., March 1, 1960 297
Frederich, William J., December 24, 1959 446
Gardenier, William H., February 22, 1960 297
Getze, George Wilbur, April 6, 1960 446
Ghrist, David Martin, November 14, 1959 60
Gibbons, Joel Marion, November 16, 1959 60
Goodman, Ephraim Frank, February 10, 1960 297
Gramlich, Henry Frank, February 4, 1960 238
Haenszel, Allen Lee, December 13, 1959 385
Hambleton, Holland George, May 3, 1960 446
Herrick, Frank Leslie, November 12, 1959 297
Holzman, Earl E., January 28, 1960 238
Inman, Thomas George, January 10, 1960 238
Kelso, Raymond W., Sr., April 19, 1960 446
Kohlmoos, Henry J., December 5, 1959 172
Kohn, Jacob A., March 30, 1960 446
Konigmacher, Adam H., November 20, 1959 297
Lang, Maurice Daniel, January 31, 1960 446
Laton, George Peavy, February 10, 1960 297
Legge, Robert Thomas, March 21, 1960 385
Laue, Richard John, January 13, 1960 446
Lewis, Silas Arthur, February 18, 1960 385
Lewis, William B., November 28, 1959 60
McAtee, John Stephen, April 10, 1960 446
McChesney, George Jewett, March 11, 1960 385
McGuire, John J., October 26, 1959 60
McMartin, David Edmond, March 14, 1960 385
Mesirow, Maurice Elias, January 29, 1960 446
Mulvany, Thomas Anthony, March 26, 1960 385
Murray, Leo Charles, January 29, 1960 238
Naeckel, Harold William, January 29, 1960 238
Nelson, H. Milford, November 24, 1959 60
Oakley, Enoch Reed (E. Reed), August 20, 1959 60
Oviedo, Louis Jerome, February 9, 1960 385
Perelson, Harold Nathan, December 6, 1959 172
Plannette, Herbert Leslie, January 12, 1960 238
Potekin, Jesse Sanford, January, 1960 238
Quattlebaum, Leon, January 25, 1960 238
Raney, Rupert B., November 28, 1959 60
Richardson, Arthur L., January 4, 1960 238
Romonek, Philip L., November 9, 1959 60
Rood, Morris, April 22, 1960 446
Russell, Ralph Swisher, December 10, 1959 172
Schwartz, Frederick Leonhardt, November 13, 1959 60
Segal, Robert, February 20, 1960 297
Seltzer, Sol Norris, December 29, 1959 385
Siders, Richard C., February 7, 1960 297
Snell, Albert Markley, February 6, 1960 238
Sumner, William Artell, February 17, 1960 297
Sutherland, Robert Thomas, February 17, 1960 385
Swan, Alfred Hjalmar, November 3, 1959 60
Titus, Jerome Hill, February 8, 1960 238
Wilson, Edward W., April 15, 1960 446
Woolsey, Chester Howard, April 21, 1960 446
Worthington, Lois Clair, December 20, 1959 172
Yocom, Frank Willis, December 29, 1959 172

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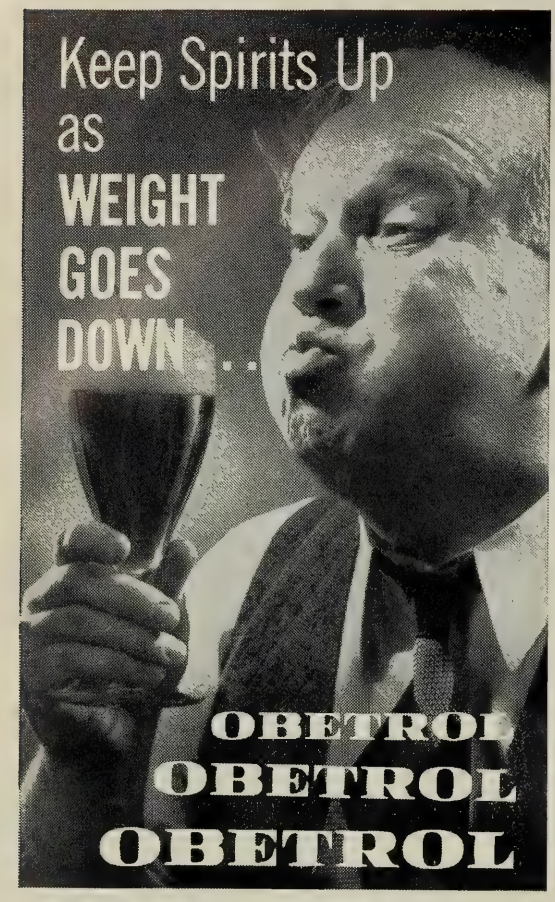
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Trachoma Vaccine Being Tested on Formosa

A newly developed vaccine against trachoma, a centuries-old disease causing blindness, is being tested on Formosa where it was developed by U. S. Navy researchers.

A preliminary study of the effectiveness of the vaccine provides "some reasons for optimism," according to an article in the April 9 *Journal of the American Medical Association.*

Trachoma vaccine appears to be "entirely safe," the researchers said.

More than 450 persons have been given the vaccine without any serious reactions, they said, and it has produced significant immunity in monkeys and humans.

The vaccine produced in humans an antibody response equivalent to that produced by natural trachoma infection, they reported.

A field study to determine the vaccine's ability to prevent trachoma in uninfected children of families in which trachoma is prevalent has been started in a rural district on the west coast of Formosa, the *Journal* article said. A study of the effect of the vaccine on children already infected with the disease also is under way in the same district.

The field studies "are designed for long-term follow-up investigation in order to obtain basic information on the immunology of the disease as well as data on the protective or curative effect," the researchers said.

Some evidence suggesting a curative effect of the vaccine was reported. Six persons were voluntarily infected with one of five trachoma viruses isolated on Formosa and then were treated with vaccine injections. While far from conclusive, they said, the results suggest that the vaccine has had a favorable influence on the course of the infections.

The trachoma virus was first reported isolated in Peking in 1957. The highly contagious disease, once an almost universal affliction, is still widespread in China, Egypt, India, and other eastern countries.

The authors of the article are J. Thomas Grayston, M.D., San-Pin Wang, M.D., Robert L. Woolridge, M.S., Yen-Fei Yang, M.D., and Paul B. Johnston, Ph.D., of U. S. Naval Medical Research Unit No. 2, Taipei.

Russian Medicine Inferior to U. S.

The overall quality of Russian medicine is "well below" that of the United States, according to *Today's Health* magazine.

An article in the May issue of the American Medical Association magazine said "the kind of medical care the Russian people receive varies widely from one location to another.

"Russia is a vast and sprawling land and most of

(Continued on Page 78)

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Russian Medicine Inferior to U. S.

(Continued from Page 76)

its people live away from the cities. The kind of public health, sanitation and medical care they enjoy, therefore, is by our standards poor."

"The State insists on medical services to all citizens, but it gives the physician a limited budget, insufficient laboratory personnel and equipment, and saddles him with a patient and administrative load far in excess of that which any physician can handle and still practice a high quality of medicine," it said.

"The Soviet Union has been able to achieve widespread medical care by speeding up the training of its physicians and by employing, on a wide scale, subprofessional personnel . . . and others with even less training."

The article also mentions a scarcity of drugs and other medical supplies and points out that most medical visitors to Russia are struck by the fact that medical equipment ranges from modern to archaic.

Another weakness, it said, was the separation of basic experimental work from clinical research, i.e., research that applies to human beings.

Dr. Michael E. De Bakey, a distinguished American surgeon who visited Russia in 1958, was quoted as saying that "this lack of integration tends to make some of the studies pointless and to provide information that has no clinical significance . . . and no fundamental value."

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	Children: 50 mg/Kg; up to 100 mg/Kg in severe cases.	Up to 7 days
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	Children: 22 mg/Kg; larger doses when required.	5 days
Preoperative Suppression of Intestinal Flora	*Adults:* 2 Gm.	4 days
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Popular Sedative Causes Profound Judgment Errors

A widely used barbiturate produces profound errors of judgment when taken in average doses, two Harvard researchers said in a recent issue of the *Journal of the American Medical Association.*

Gene M. Smith, Ph.D., and Henry K. Beecher, M.D., said "the striking judgment distortion produced by the barbiturate is particularly important from the practical standpoint.

"One can only wonder how many accidents occurring each year on the highway, in industry, in the home, and elsewhere are due in part to impairment produced by barbiturates, analeptics [stimulants], tranquilizers, and other drugs given to ambulant patients," they said.

"The widespread use of these medicaments by persons whose decisions, judgments, and behavior affect their own welfare and the welfare of others makes further quantitative assessment of the mental and behavioral effects of these agents a matter of practical importance."

The researchers studied the effects of a typical barbiturate, secobarbital, and amphetamine, a stimulant, on 15 college men swimming time trials alone and in groups of three. Each swimmer was "a highly

(Continued on Page 91)

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Popular Sedative Causes Profound Judgment Errors

(Continued from Page 82)

trained athlete in midseason form who was skilled in estimating his performance time," they said.

Nevertheless, they found that swimmers given secobarbital evaluated their speed in solo trials as significantly better than usual when their performances actually were significantly slower.

All the data, they said, "clearly demonstrate that a profound impairment of judgment was produced under the solo condition; most of the data suggest that a moderate impairment of judgment was produced when the subjects swam in groups of three."

The effects of amphetamine on judgment were not conclusive, they said. However, when the subjects given amphetamine swam alone, most of them failed to recognize the improvement in their performance produced by the drug or failed to appreciate its extent.

Previous studies have shown that barbiturates and other drugs alter performance on psychomotor and mental tests, they pointed out.

Both men are associated with the Anaesthesia Laboratory of the Harvard Medical School at the Massachusetts General Hospital, Boston.

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(Continued from Page 86)

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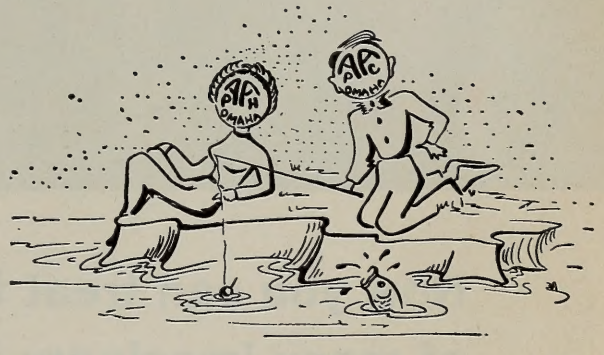
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